LIVING PLANET REPORT 2022

YOUTH EDITION
A GUIDE FOR OUR FUTURE

WHAT IS THE LIVING PLANET REPORT?

The Living Planet Report is produced every two years by WWF, with input from leading experts and other organisations. It is a health-check for the planet, showing how the natural world is doing, what threats it faces and what this means for us humans. The conclusions and recommendations in the Living Planet Report are based on several different measures, one of the biggest being the **Living Planet Index**.

WHAT IS THE LIVING PLANET INDEX?

Experts all over the world have been measuring changes over time in the populations of thousands of animal species, from counting the number of wildebeest in the savannah, to trapping the movement of ocelots (a species of wild cat) on cameras in the Amazon rainforest. Scientists bring these data together into a database and analyse it to come up with the Living Planet Index (LPI).

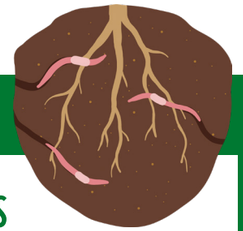
The LPI only uses data for species that have been monitored at least twice at any time since 1970, which is considered the baseline year. Even so, the LPI is able to track changes in almost 32,000 populations of 5,230 species including mammals, birds, reptiles, amphibians and fish. The patterns that scientists find in these data help them to understand the health of the wider ecosystems.

WHY DOES IT MATTER?

Our living planet operates as a living system, resulting in the conditions for life that have allowed humans and other species to thrive; clean air, fresh water, a breathable atmosphere and the conditions needed to grow food. The huge diversity of species is a very important part of this system. The planet cannot work in the same way if the amount of wildlife and wild spaces is reduced, or when the movement of wildlife or the flow of natural processes is disrupted.

MOVEMENT OF WILDLIFE

Animals may need to migrate long distances across grasslands, across oceans, or down and up rivers, to survive seasonal changes and complete their life cycles. Where human activities prevent this happening the survival of that population can be threatened, and ecosystems that depend on their movement are also disrupted. Other species need large areas to forage or hunt enough food, and if a landscape is crossed by a road or railway they can struggle, even if the total amount of habitat is not significantly reduced. This is known as 'fragmentation'. For example, tigers need huge hunting grounds, but forests in which they live and hunt are often fragmented by roads, causing problems.



NATURAL PROCESSES

Examples of important natural processes include the water cycle and soil production.

Freshwater systems can be disrupted by dams that block rivers, the over-use of water in homes and on farms, and the loss of trees that would usually slow the rate that rainwater reaches the ground.

Healthy soil is created by a complex ecosystem that includes microscopic bacteria, insects, fungi, and earthworms. Just one handful of soil can contain more living organisms than there are people living on Earth. When working properly, these natural processes break down dead matter such as leaves, and ensure that the soil is rich in nutrients and oxygen. However pesticides used for farming can damage this soil ecosystem, while deforestation can lead to a lack of plant matter to make new soil, and exposed soil with no roots to hold it together being washed away by rain.

BIODIVERSITY

is the term used to refer to all the different living things found in an ecosystem. When an ecosystem has a lot of biodiversity it is usually more resilient to change or problems, because there are so many connections and relationships that each living thing is more likely to find another way to cope if one of these is lost or damaged.[1]

NATURE IN DECLINE

The Living Planet Index shows that wildlife populations studied around the world have, on average, declined by 69%, and this trend is not yet slowing down. Some have declined by much more – including many freshwater populations. This decline in wildlife and wild places is mostly due to human activities such as deforestation, large-scale farming, pollution, and construction of buildings and transport networks. Such activities prevent the living system from working as we need it to in order to provide for the needs of the growing human population. The LPI is one of many different indicators that confirm that biodiversity is declining.

On a LPI graph showing the change in biodiversity on our planet, the line has dropped steadily since 1970, and animal populations continue to decline. It is essential that we take the actions needed to change this trend and 'bend the curve' of biodiversity loss. This means not only stopping it from declining, but making changes that allow it to recover, so that the line on our graph slopes upwards and biodiversity increases to the levels we had in the past. This will not be easy, but if we act quickly, and with an understanding of the way different parts of the living system depend on each other, we can start to make the world wild again, and therefore healthier and more resilient.

In the last few decades human activities have destroyed forests, grasslands, wetlands and other important ecosystems all around the world, threatening human well-being as well as wildlife. **This is an unsustainable way for us to live on this planet.**

BIODIVERSITY INTACTNESS INDEX

Scientists are now monitoring how much overall biodiversity remains in different areas of the globe compared to what once existed there. This is called the Biodiversity Intactness Index (BII). If an area's BII drops below 90% it starts to function less well, causing problems for the wildlife and people who depend on that landscape. If the BII falls to 30% or less there is so little biodiversity left that the ecosystem could be at risk of collapse. The BII of Canada is 89%, suggesting that the scale of nature loss could start to affect the healthy functioning of the ecosystem. For the UK, the BII is already down to 50%.

SUSTAINABLE DEVELOPMENT

is defined by the United Nations as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. In other words we must not keep taking more from the natural world than the planet can naturally replace, or we leave it damaged and less able to supply for our needs and the needs of others now and in the future.

SPOTLIGHT ON:
SHARKS & RAYS

The population size of sharks and rays worldwide has dropped by 71% over the last 50 years, mainly due to fishing practices.

By 2020 more than three quarters of all ocean-dwelling species of shark and ray (24 out of 31) were at risk of extinction.

The oceanic Whitetip shark has declined by 95% globally, and is now classed as critically endangered on the IUCN Red List.

Sharks and rays are top predators in ocean food webs, and their loss can cause huge problems for other species when the ecosystem becomes unbalanced.

Sharks are also extremely important to people in communities who rely on fishing. The loss of sharks can lead to changes in behaviour in other species that would usually restrict their movements and actions to avoid being preyed on by sharks. Without the sharks, these predators can severely reduce the population of other species, resulting in fishing nets coming up empty.

DID YOU KNOW?

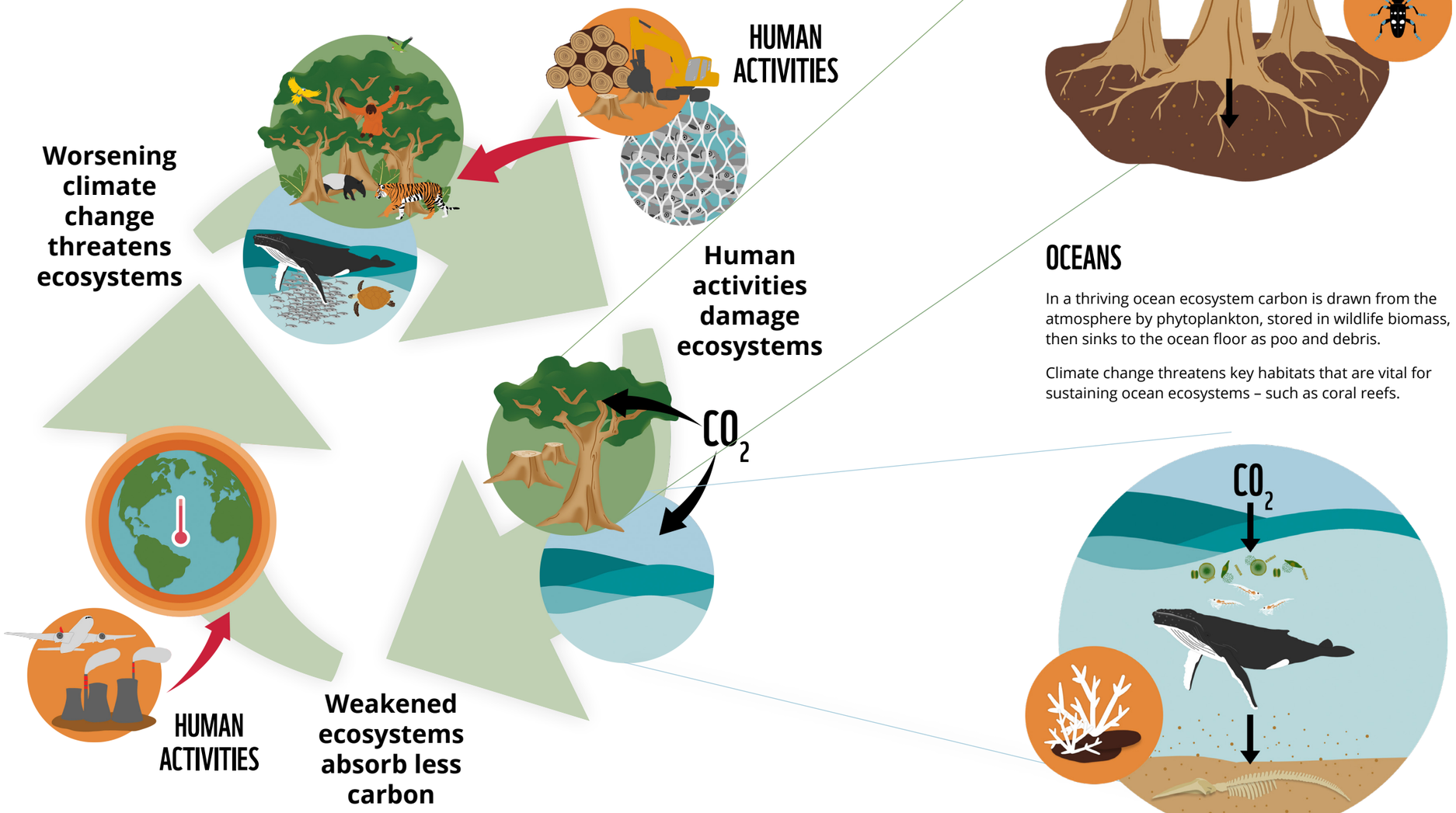
Have you ever found a leathery pouch like this on a beach? You may have found a 'mermaid's purse', which is the name given to the egg cases of some sharks and rays.

Although many sharks and rays give birth to live young (called pups), others leave these tough egg cases hidden in seaweed, in which their babies develop until they are ready to fend for themselves.

If you find one you can help scientists monitor shark and ray populations by recording your find at www.sharktrust.org/great-eggcase-hunt

THE GLOBAL DOUBLE EMERGENCY

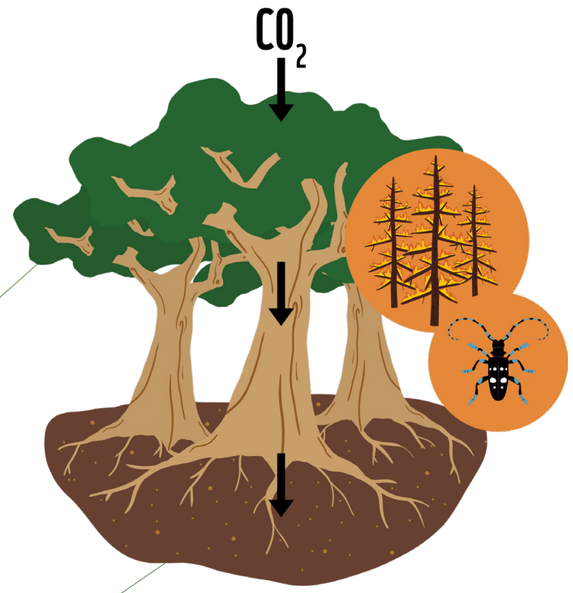
Climate change is talked about more than the loss of wildlife and habitats, but these two crises are strongly connected.



FORESTS

Healthy forests draw carbon from the atmosphere as CO2 and lock it into trees and soil.

Climate change increases the risks from forest fires and invasive pests, which are especially damaging for forests that are fragmented by human activities.



OCEANS

In a thriving ocean ecosystem carbon is drawn from the atmosphere by phytoplankton, stored in wildlife biomass, then sinks to the ocean floor as poo and debris.

Climate change threatens key habitats that are vital for sustaining ocean ecosystems – such as coral reefs.

The damage that is being caused to the natural world by habitat destruction is making our planet less able to draw carbon from the atmosphere, and in many cases releases more carbon that was previously stored as wood or in the soil. This means that more carbon dioxide enters the atmosphere and speeds up global warming.

Climate change is already starting to have effects in the natural world, and if the average increase in global temperature is allowed to go above 1.5 degrees, climate change will become a greater and greater threat to wildlife.

We cannot solve either of these two problems unless we address both together.

Increasing heatwaves and droughts resulting from higher global temperatures threaten many species. During a heatwave in Australia in November 2018

AT LEAST

23,000

'FLYING FOX' BATS DIED FROM THE HEAT OVER TWO DAYS,

reducing the nation's population by almost a third.

TRANSFORMING OUR RELATIONSHIP WITH OUR PLANET

FROM THIS...

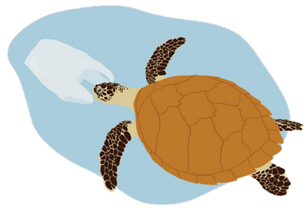
CLIMATE CHANGE

The Earth has warmed by 1.2oC since pre-industrial times, and current human activity and political pledges will fail to prevent it warming more than 2oC. Beyond 1.5oC global warming will cause huge problems for people and nature.[2]

POLLUTION

300-400 million tonnes of pollution are dumped into freshwater ecosystems every year[3].

Ocean plastic pollution has increased by ten times since 1980, and now affects more than 267 species – including 86% of marine turtles[4].

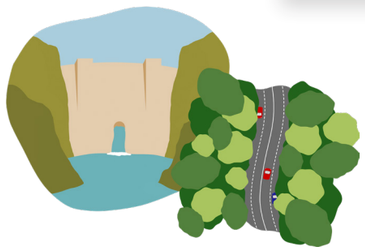


HABITAT LOSS

75% of the Earth's ice-free land surface has been changed by humans, mainly to create farmland for food production. 90% of wetland area has been lost globally. About 100,000 sq km of forest is lost per year, or roughly one football pitch every two seconds[5].

WILDLIFE EXTINCTIONS

1 million species are threatened with extinction in the coming decades[6].



HABITAT FRAGMENTATION

Natural processes are becoming disrupted as habitats in land, sea and freshwater are fragmented.

WILDLIFE & CLIMATE DATA

...TO A HEALTHY LIVING PLANET THAT WORKS FOR...

NATURE

Connections between protected and restored habitats worldwide allow movement of wildlife species and the flow of natural processes.

PEOPLE

Fair, just management of natural resources to ensure everyone has access to healthy food and a stable environment.

Conservation led and informed by Indigenous Peoples.

Communities most affected by climate change nature loss are involved in decisions that affect their lives, and supported to adapt.

CLIMATE

Global carbon emissions cut through a shift to renewable energy and sustainable practices. Global warming limited to 1.5 degrees.

DID YOU KNOW?

In 2021 the United Nations Human Rights Council declared that everyone, everywhere, has the right to live in a clean, healthy and sustainable environment.

SPOTLIGHT ON:
THE AMAZON

The Amazon is home to the world's largest rainforest, covering 6.7 million square kilometres across nine countries in Latin America, and the world's largest river (by volume of water). **The Amazon is vital to global biodiversity, being home to at least 10% of all animal and plant species on the planet.** It is also of vital importance to humans - not only the 30 million people who live there (including about 3 million Indigenous Peoples), but to people all around the world.

The Amazon provides food, wood and medicines, and helps stabilise the climate by capturing carbon from the atmosphere. The trees in the Amazon also release 20 billion tonnes of water into the atmosphere per day, driving important weather systems that, in turn, deliver freshwater to landscapes across the globe.

We have lost 17% of the total forest cover in the Amazon due to felling of trees for timber or conversion of forest to farmland, and another 17% has been degraded[7]. Land is described as 'degraded' when it is not completely deforested but it has lost some of its vegetation and is no longer able to support the ecosystem as much as before.

Scientists say that if we continue to destroy the Amazon at this rate we will soon reach a tipping point, when the forest will no longer be able to work in the same way. The whole planet will lose the benefits of the Amazon, which will gradually become a drier and less biodiverse ecosystem, similar to a savannah (a grassy plain with few trees)

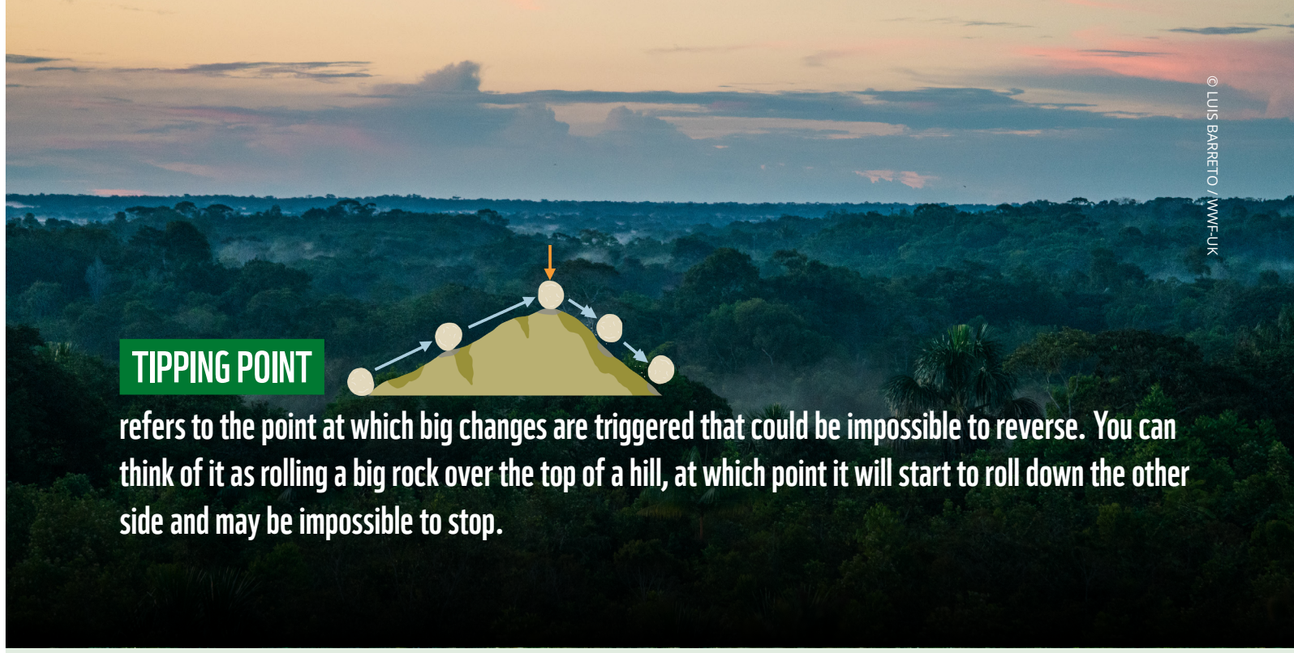
INDIGENOUS PEOPLES

means the first human inhabitants of an area, who have traditions and culture associated with a landscape because they have generations of history there. It is 'Peoples' rather than 'People' because it refers to many different groups.

Indigenous Peoples are very important to any effort to protect wildlife, because they often have the best understanding of the ecosystem and how to draw benefits from a landscape without breaking the natural balance. Often they are the most affected by issues caused by unsustainable use of a landscape's resources, despite not being to blame for these practices and the resulting problems. This means that as well as protecting wildlife in a landscape, we must respect and promote the rights of Indigenous Peoples.

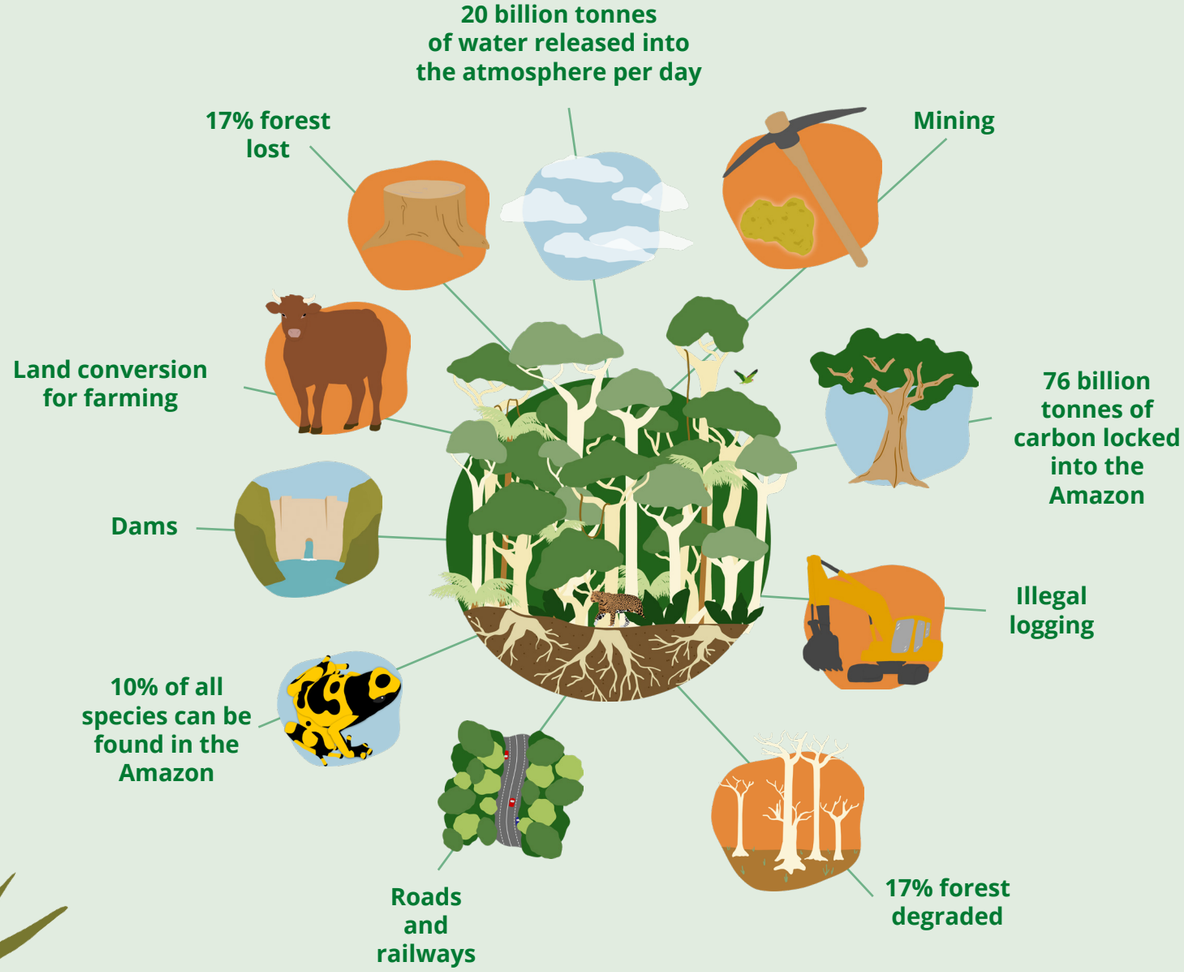
Since 2007 more than 140 countries around the world have agreed to respect and protect the rights of Indigenous Peoples, set out in The UN Declaration on the Rights of Indigenous Peoples[8].

Amazonian Indigenous Organizations, representing 511 nations and allies, are calling for a global agreement for the permanent protection of 80% of the Amazon by 2025. This is seen as an urgent action needed to stop us reaching the tipping point of the destruction of the Amazon and the huge problems this would cause for the planet[9].



TIPPING POINT

refers to the point at which big changes are triggered that could be impossible to reverse. You can think of it as rolling a big rock over the top of a hill, at which point it will start to roll down the other side and may be impossible to stop.



WHAT DOES THIS MEAN FOR ME?

We can all feel very small in the face of these big issues, and that can be worrying. But we are not helpless, and we are not alone.

Everyone can play a part in shaping a positive future for people and nature. That includes you!

We know that the way humans live on our planet now is unsustainable, and that changes must be made. But what the future will look like is not yet defined. It's up to all of us to ensure that we shape the world we want – where the needs of people and nature are met in a way that is fair to all.

Humans are the best problem solvers that have ever lived on our planet, and addressing issues like climate change, loss of biodiversity and plastic pollution doesn't just mean having to sacrifice things we enjoy today. If we use our imaginations and work together we can reimagine our relationship with this living planet and enjoy delicious food, travel, and fun pursuits in beautiful surroundings, without taking away from the wildlife and people who share our planet.

We are not helpless! We can make change happen faster, and in the way that will shape the positive future that we want.

You have more influence than you realise. Think about people who may be affected by what you do and say. It might be your family, friends, and social media followers. Then think about systems you can influence – your school, local businesses, or even the decision-making in your local community, district or country. Each person you inspire to act sends out their own ripples of change through their own sphere of influence. Remember – if you can come together with others who feel the same you will have a louder voice, more influence, and greater impact.

THERE ARE THINGS WE CAN DO RIGHT NOW TO START INFLUENCING CHANGE.

1 MAKE INFORMED CHOICES

When you understand the problems affecting our living planet, and their causes, you can make choices about what you do, buy or eat that are good for people and nature. Take the time to look for information on packaging that tells you what is in it, where its ingredients came from, and whether it was produced in a way that is planet-friendly. EG if there is palm oil in it, was that palm oil sustainably sourced? If not the product could contain palm oil grown by clearing rainforest to grow palms on the fertile soil.

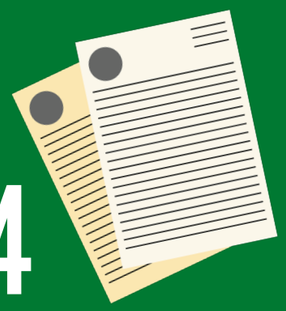
2 SPEAK UP

Peaceful protest, blogging, writing for a local paper or sharing your thoughts with local decision-makers and businesses are all things you can do to influence others. Remember that the people you influence may then be able to make have more impact through their choices and actions than you.

3 GIVE NATURE A HAND

Whether you live in the heart of a city, on the seashore, or in the countryside, your local patch is part of a connected living landscape, and when it supports wildlife the whole world benefits. Get out and see what wildlife shares your local environment, record it to help scientists monitor the health of our living planet, and see what you can do to help local wildlife thrive. Could you plant more trees, or create new habitats such as a pond, woodpile or bird box?

Use the free Seek by iNaturalist app to identify, record and submit your wildlife sightings, and you can help scientists monitor global biodiversity.



4 PLAN A SUSTAINABLE CAREER PATHWAY

Every job and every organisation can and must become sustainable. By building up your knowledge and skills in sustainability you can prepare yourself to choose and succeed in a career that is good for you and the planet.

ABOVE ALL, REMEMBER THAT YOU ARE NOT ALONE.

The world is waking up. We might want things to move faster and we may wish they had moved much sooner, but world leaders are talking about how to solve the problems we face, and are recognising the science that says how quickly we have to make change. The opportunity we all have is to help that change happen quickly, and to ensure that the future that is shaped is the best possible one for people and nature.

A NOTE ON FOOTNOTES

Where this report provides facts that are known because of scientific studies, the source of that fact is often provided as a 'footnote'. When you read or hear a fact that could shape what you think or do, it is extremely important that you can check that it really is supported by evidence from a reliable source. People, businesses and even governments may sometimes benefit from hiding the truth about an issue if there is a risk that they could be held responsible for problems or forced to take action to address an issue that costs them money. Always be wary of 'facts' that are shared to support an argument in an article, speech, video or social media post. If the source is not provided, or it is not a source that has a reputation for being scientific, you should not accept the fact without checking for yourself if it is true.

FOOTNOTES

[1] www.ourplanet.com/en/video/what-is-biodiversity/

[2] European Union's Copernicus Climate Change Service https://climate.copernicus.eu/copernicus-globally-seven-hottest-years-record-were-last-seven Accessed 19/01/22

[3] IPBES (2019) Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. ES Brondizio, J Settele, S Díaz & HT Ngo (eds).

[4] IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

[5] Living Planet Report 2020, WWF and partners

[6] 500,000 animals and plants, and 500,000 insect

[7] Science Panel for the Amazon (2021). Executive Summary of the Amazon Assessment Report 2021. C. Nobre & A. Encalada, et al. United Nations Sustainable Development Solutions Network https://www.theamazonwewant.org/amazon-assessment-report-2021/

[8] UN Declaration on the Rights of Indigenous Peoples: https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf
Youth-friendly version: https://www.un.org/development/desa/indigenouspeoples/publications/2013/09/adolescent-friendly-version-of-the-un-declaration-on-the-rights-of-indigenous-peoples/

[9] https://amazonia80x2025.earth/

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