

WHY DOES IT MATTER?

Our living planet operates as a living system, resulting in the conditions for life that have allowed humans to thrive. Biodiversity is a very important part of this system, and it cannot work in the same way if the amount of wildlife and wild spaces is reduced. Biodiversity brings lots of direct benefits that we will lose if we continue to destroy the natural world, but we are starting to see that lots of other problems are also caused when the balance is upset and biodiversity is lost.

In 2019, Africa had its largest outbreak of desert locusts in decades when unusually heavy rainfall in the Arabian Peninsula created perfect breeding grounds for the locusts, which migrated to East Africa and South Asia causing widespread crop devastation. Also, in 2019, an exceptionally hot and long heatwave led to extreme droughts in India and Pakistan, forcing tens of thousands to abandon their homes and causing many deaths. Just a few months later, Australia experienced one of the most intense bushfire seasons ever recorded, with more than 10 million hectares burnt and huge numbers of wild animals killed. This crisis was worsened by unusually low rainfall and record-high temperatures, as well as excessive logging.

In 2020, a previously unknown coronavirus, COVID-19, generated a pandemic that has affected almost everyone on the planet, and is having a huge impact on the global economy. 60% of recent large-scale outbreaks of diseases, including COVID-19, come from animals, and crossover into

human populations because of the way we are destroying habitats, harvesting wildlife and farming livestock.

All of these disasters have been the result of human-induced damage to the natural world, and it is likely that more damage to the environment will result in problems like these becoming more frequent and more severe. It will become harder and harder to achieve a world in which everyone has the opportunities and the quality of life set out in the United Nations Sustainable Development Goals.

It is clear that saving the environment is vital if we want to save ourselves.

As well as the risk of disasters that result from our destruction of the natural world, we are increasingly understanding that biodiversity is important if we want to cope with a changing world. As conditions change because of climate change, some species will not survive. The greater the variety and number of different species in an ecosystem, the higher the chance that some species will survive and take the place of those that are lost, allowing the ecosystem to survive.

Humans have relied on chemicals and materials discovered in the natural world for many important advances in science. If we are not careful, species that offer vital solutions to challenges we face in the future may be lost before we have the chance to discover them.

The natural world is a resource that we cannot afford to lose.

As conditions change on our planet, scientists need to be able to explore the different varieties of food crop species and find those that will allow us to continue to grow the food we need. If we don't protect biodiversity, that means there will be fewer options for us to draw on when we need them most. In 2007 frost wiped out the entire potato harvest in Peru's Huancavelica region, except for one variety: Yana manua. If the population had relied on just one variety that was less resilient to frost there could have been a severe food shortage.



WHAT IS DRIVING THE DECLINE?

For decades humans have been using resources faster than they can be replaced by nature. Our current lifestyles mean that humans currently demand 1.6 times more than the amount that Earth can regenerate. It is like living off 1.6 Earths. Every year we leave nature weaker and with fewer resources – and less able to ensure our future survival. Biodiversity loss is one symptom of the damage being caused by these unsustainable activities.

The total Ecological Footprint of the human population is too high for the planet to carry on sustaining forever. However not every human has the same Ecological Footprint, and it is by decreasing the amount that the average human consumes that our impact can be lessened. That means the humans on the planet that use the most resources need to be the ones making the biggest changes to lower their impact.

WHAT CAN WE DO?

We need to rethink our relationship with the planet and find the balance that will allow us and the rest of nature to survive. Whenever something that humans are doing is resulting in damage to the natural world, there are three possible solutions.

Stop doing it altogether, and give up a product or activity. The problem with this is that we might have to find an alternative, which could also cause problems.

Do it less, so that nature is able to replace what we take or absorb the impact of our action. This could mean that those humans whose lifestyles use the most resources need to be satisfied with less, or find ways to make the most of less by wasting less food and reusing things rather than replacing them.

Find new ways to do it so that we get the same benefit but in a way that does not cause damage to the planet. An example would be to use renewable energy to power our electronic devices and heat our homes, rather than energy produced by burning fossil fuels.

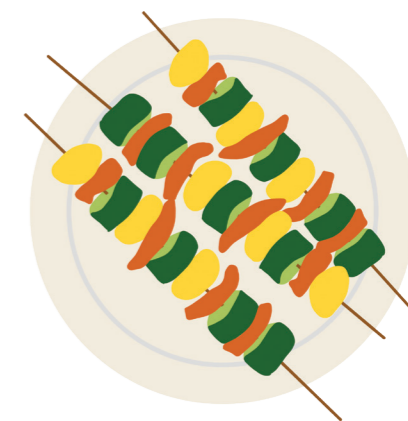
Scientists are suggesting that these three actions would be the most important if we want to start living in a sustainable way and start to bend the curve in the next few years.

1

Transform food production and consumption

so that we produce enough for everyone, but in a sustainable way. That means farming in a way that uses less space (stopping habitat destruction), less water, and fewer chemicals that harm the ecosystem. It also means stopping the wastage of food, changing some of our diets, and a change of fishing practices to ensure that the oceans can thrive and replace what we take out.

Change at home: Eat a more plant based diet, choose food that has not been produced in a way that causes deforestation, and buy locally.



2

Tackle climate change by cutting greenhouse gas emissions and investing in renewable energy alternatives.

Change at home: Check your energy is from 100% renewable sources.



3

Invest in 'nature-based solutions' that can support biodiversity while playing an active role in slowing climate change and protecting people and wildlife from its effects. For example, carefully choosing places to plant more forests can strengthen landscapes, improve soil quality and capture carbon to help in the fight against climate change. In urban environments, trees improve air quality, prevent floods and keep residential areas cool, and simply having trees nearby improves the physical and mental health of people living and working there.

Change at home: Take action for local biodiversity.

