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State of Nature — Scientists for Extinction Rebellion

7–9 minutes

Unite for Nature - #NoNatureNoFuture



[On the 25th November, 20 scientists took to Defra](#) (Department for Environment, Food and Agriculture) to take action against government inaction on protecting nature and biodiversity in the UK as 570 environmental laws are set to be

revoked - leaving nature open to further rapid degradation.

Nature is in crisis, nationally and internationally. Here are some hard, scientific facts about the state of biodiversity decline and loss, and the failure of governments, including the UK, to address this.

International

- A global, intergovernmental assessment of biodiversity and ecosystems concludes that up to one million animal and plant species are now threatened with extinction, many within decades. [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services \(IPBES\) \(2019\)](#)
- Of over 150,000 species of animals and plants carefully assessed for the [International Union for the Conservation of Nature \(IUCN\) Red Data List](#), 42,000 (28%) have been identified as likely to be at risk of extinction in the near future.
- A global study of wild plant species concludes that about 40% are now threatened with

extinction. [Natural History Museum \(2020\)](#)

- Recent rates of extinction of plants and animals are running hundreds of times faster than in pre-human times and are growing. [The Royal Society \(2021\)](#)
- The 2022 Living Planet Report measured changes in monitored sub-populations of over 5,000 wild animal species worldwide and found that, on average, these had declined by almost 70% since 1970. (To be clear, this is not the same as saying that the total numbers of these animals has fallen by 70%, but it is a dramatic trend). [WWF \(2022\)](#)
- Why is this happening? The [UN Conference of Parties on Biodiversity \(COP15\)](#) in December 2022 [identified five drivers of the biodiversity crisis](#), all of them caused by humans:
 - changes in land use, particularly agriculture
 - climate change
 - pollution, including pesticides and plastics
 - over-exploitation of wild species
 - introduction of alien invasive species.

- 58% of all mammal biomass on earth is now livestock. Only 6% of the combined weight of mammals on Earth is wild. [Proceedings of the National Academy of Sciences \(PNAS\) \(2023\)](#)
- Scientists estimate that 3.4 million km² of inland wetlands have been lost since 1700, mainly due to conversion to farmland. This loss equates to around 21% of the world's wetlands, particularly in Europe, the United States and China. [Nature \(2023\)](#)
- In 2011, governments of the world adopted a Strategic Plan for Biodiversity, with 20 specific targets for 2020 (the Aichi Biodiversity targets), ranging from protecting coral reefs to reducing pollution. By 2020, none of these had been met or achieved at a global level. This marked a second decade of failure to meet internationally agreed biodiversity targets. [New Scientist \(2020\)](#); [The Guardian \(2020\)](#)
- The forest “carbon offsets” approved by the world's leading certifier and used by many big brand companies are largely worthless and could make global heating worse. [Proceedings of the](#)

[National Academy of Sciences \(PNAS\) \(2020\)](#);
[The Guardian \(2023\)](#)

The UK

Set against this global ecological emergency, how is the UK doing?

- The UK is one of the most nature-depleted countries in the world, ranking 228th out of the 240 countries in the Biodiversity Intactness Index. [BBC Newsround \(2021\)](#)
- 41% of our plant and animal species have declined in abundance since 1970, and this decline is accelerating. [The State of Nature Partnership \(2019\)](#)
- 1 in 4 of British mammals are now threatened with extinction in the UK. These include water voles, hedgehogs, the hazel dormouse, and wildcats. [The Mammal Society \(2020\)](#)
- 31% of Great Britain's amphibian and reptile species are threatened with risk of extinction. [Amphibian and Reptile Conservation \(2021\)](#)
- The abundance of farmland birds (such as corn buntings, starlings and turtle doves) has halved

due to changes in farming practices. [DEFRA \(2021\)](#)

- The abundance of key pollinator insects has declined 30% since the 1980s. [Joint Nature Conservation Committee \(2022\)](#), [DEFRA \(2022\)](#)
- 1225 ancient woodlands are under threat - 981 have been permanently lost or damaged since 2000. [Woodland Trust \(2021\)](#)
- We've allowed the loss of 90% of our wetland habitats in the last 100 years. [The Wildlife Trusts \(2018-22\)](#)
- All English rivers are polluted, only 14% are rated healthy for animals and plants. [BBC News \(2020\)](#)
- Only 38% of protected, biodiversity-rich Sites of Special Scientific Interest (SSSIs) are in a healthy state and well managed. [UK Government \(2021\)](#)
- 6 of the 10 most economically important fish stocks in the UK are overfished or at a critical level. [Oceana \(2021\)](#)

And yet

- The Government has only protected 5% of

England, against its own target of 30% by 2030.

[RSPB England \(2021\)](#)

- In committing (again) to nature restoration targets at COP15, the government ignored the advice of Natural England that it needed to protect three times its target area to meet COP commitments.

[The Guardian \(2023\)](#)

- The UK has failed to reach 17 out of 20 UN biodiversity targets agreed on 10 years ago and in six areas the UK has actually gone backwards.

[RSPB \(2020\)](#)

- DEFRA continues to approve the use of specific pesticides widely banned because of their impact on bees, against the advice of their own scientific advisors. [The Pesticide Collaboration \(2022\)](#)

- The Government's EU Retained Law Act will scrap over 570 environmental protection laws unless new legislation replaces these in the next year. [Wildlife and Countryside Link \(2022\)](#)

- There is a huge gap between the Government's environmental rhetoric and the reality of years of underfunding. Funding for environmental protection services provided by the government's

Environment Agency (EA) has been cut by 50% over the past decade. Public sector investment in conservation has fallen in real terms by 33% in five years, according to the 2020 biodiversity indicators report. [The Independent \(2022\)](#); [The Guardian \(2020\)](#).

- More than 90% of Britain's offshore marine protected areas are still being bottom-trawled and dredged. [The Guardian \(2022\)](#).
- The government has only met 4 out of 15 of the UK Marine Strategy's indicators of healthy oceans. [Wildlife and Countryside Link \(2019\)](#).

It does not have to be like this

If governments act URGENTLY to protect and restore ecosystems, as they have promised, nature will recover. Communities around the world are coming together to protect and restore nature. They need help and support.

Almost 50 species have been saved from extinction through the work of dedicated conservationists, supported by local communities and governments. Some of the species which

have been saved from the brink in recent years include the California Condor, the Iberian Lynx and Przewalski's Horse. [The Guardian \(2022\)](#)

But we must act quickly. Extinction is forever.