



LIVING PLANET REPORT 2024

A system in peril

YOUR SUMMARY

October 2024



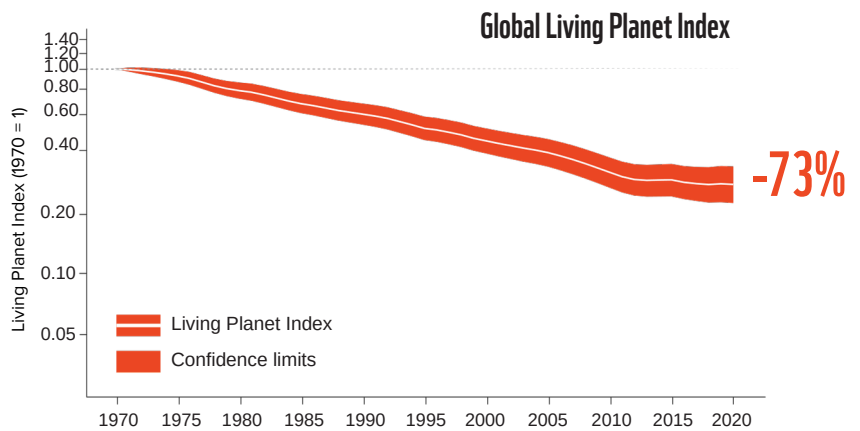
Kirsten Schuijt,
Director General of
WWF International:

“The linked crises of nature loss and climate change are pushing wildlife and ecosystems beyond their limits, with dangerous global tipping points threatening to damage Earth’s life-support systems and destabilize societies. Although the situation is desperate, we are not yet past the point of no return. The decisions made and action taken over the next five years will be crucial for the future of life on Earth. The power – and opportunity – are in our hands to change the trajectory. We can restore our living planet if we act now.”



What is the Living Planet Report?

The Living Planet Report (LPR) is a comprehensive study of trends in global biodiversity and the health of the planet. Now in its 15th edition, the report provides a science-led overview of the state of the natural world and includes the Living Planet Index (LPI), which tracks how species populations are faring around the world. This time it reveals a **catastrophic 73% decline in the average size of monitored wildlife populations over just 50 years (1970-2020).**



Declines in wildlife populations can act as early warning indicators of increasing extinction risk and the potential loss of healthy ecosystems. When ecosystems lose resilience they are more susceptible to additional disturbance and the report examines how the dual crises of nature loss and climate change are pushing the planet closer to dangerous and irreversible tipping points.

The LPR underlines the urgency of the world meeting global goals on nature, climate and sustainable development by 2030. To achieve this, it presents solutions to transform conservation and the energy, food and financial systems in a fair and inclusive way. The report warns that the next five years will be crucial for the future of life on Earth but that there is hope: **we can restore our living planet if we act now.**

The 2024 global Living Planet Index shows an average -73% decline in monitored vertebrate populations. The percentage change in the index reflects the average proportional change in animal population sizes tracked over 50 years - not the number of individual animals lost or the number of populations lost. The white line shows the index values and the shaded areas represent the statistical certainty surrounding the trend (95% statistical certainty, range -67% to -78%) Source: WWF, ZSL. The Living Planet Index database. 2024.

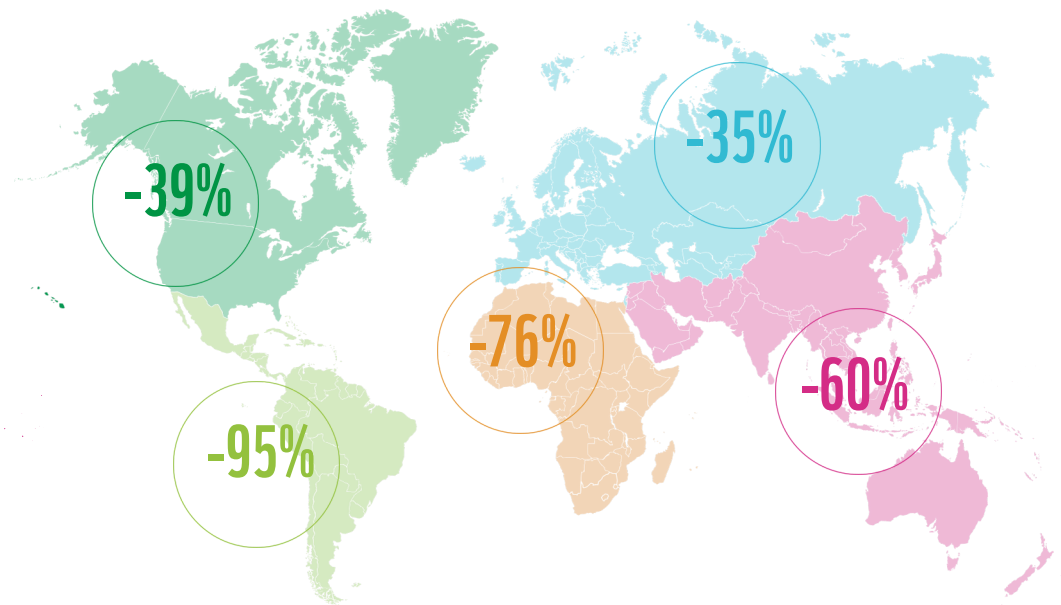


Measuring nature's decline

Measuring how and why nature is changing is critical if we are to effectively address the threats to our vital natural systems. The LPI is produced by ZSL (Zoological Society of London) and is based on almost 35,000 population trends and 5,495 species of vertebrates (amphibians, birds, fish, mammals and reptiles). The LPI and similar indicators all show that nature is disappearing at an alarming rate.

Freshwater populations have suffered the strongest declines, followed by terrestrial and marine populations.

This reflects the increasing pressure placed on freshwater habitats and species, for example freshwater fish are often threatened by dams and other alterations to their habitat that can block migration routes.



The Living Planet Index by IPBES regions for combined terrestrial and freshwater populations from 1970 to 2020

Trends vary between regions due to different types and levels of pressure placed on nature over the last 50 years. The steepest declines are seen in Latin America and the Caribbean, Africa and Asia and the Pacific. In both Europe and North America large scale impacts on nature were already apparent before the start of the index in 1970, explaining why there is less of a negative trend.

Habitat degradation and loss, driven primarily by our food system, is the most reported threat in each region, followed by overexploitation, invasive species and disease. Other threats include climate change (most cited in Latin America and the Caribbean) and pollution (particularly in North America and Asia and the Pacific).

FRESHWATER



-85%

TERRESTRIAL



-69%

MARINE



-56%

How is the Living Planet Index calculated?

Across the globe, wild animals are counted for various reasons. If monitoring of a species is carried out over multiple years in a particular area, it can indicate how the population size of that species in that specific location has changed.

The LPI uses these changes in population sizes to establish whether, on average, the relative abundance of monitored species has increased, decreased or stayed the same. To do this, information on changes in abundance is taken from the Living Planet Database and then averaged together.

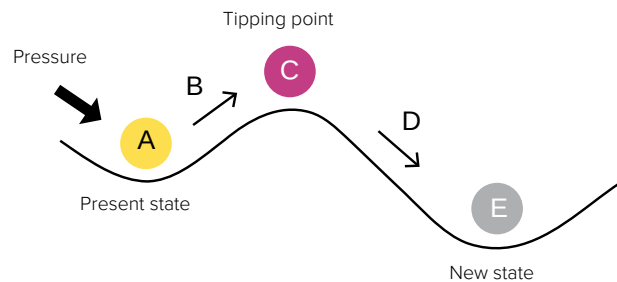
When referring to the LPI, we use the word 'decline' rather than 'loss' as the LPI highlights an average trend in population change and not an average of the total number of individual animals or species lost.

The LPI in the 2024 and 2022 reports should not be directly compared as the dataset changes and evolves for each edition. This year's index includes 265 more species and 3,015 more populations than the last LPI.

Dangerous tipping points are approaching

When cumulative impacts reach a threshold, the change becomes self-perpetuating, resulting in substantial, often abrupt and potentially irreversible change - a tipping point. Tipping points in the natural world occur when individual or combined pressures such as habitat degradation, land-use change, overharvesting or climate change push the system beyond a critical threshold.

A number of tipping points are highly likely if current trends are left to continue, with potentially catastrophic consequences. These include global tipping points that pose grave threats to humanity and most species, and would damage Earth's life-support systems and destabilize societies everywhere.



A system remains within its present state (A, yellow circle) even if small-scale changes continuously occur, as long as it can absorb the pressures (or drivers of change). However, the pressure (B) can either gradually, or through a shock, push a system to its limit or tipping point (C, pink circle). When a system reaches a tipping point change accelerates (D) until it reaches a new state (E, grey circle).

GLOBAL TIPPING POINT

Amazon rainforest dieback

The Amazon rainforest holds more than 10% of Earth's terrestrial biodiversity, stores 250–300 billion tons of carbon and is home to over 47 million people. As climate change and deforestation lead to reduced rainfall, a tipping point could be reached where the environmental conditions become unsuitable for tropical forest, triggering an irreversible change. The impacts would be devastating for people and nature, with changes to weather patterns affecting agricultural productivity and global food supplies. A change of this magnitude would also accelerate global climate change, as the Amazon would shift from being a carbon sink to a source of emissions through fires and plants dying off. Up to 75 billion tons of carbon could be released into the atmosphere, rendering the 1.5°C goal impossible to achieve.

GLOBAL TIPPING POINT

Mass die-off of coral reefs

In the ocean, underwater heatwaves driven by climate change lead to warmer surface waters and cause large-scale coral bleaching. In Australia's Great Barrier Reef, mass bleaching events have been observed in 1998, 2002, 2016, 2017, 2020, 2022 and 2024. While some reef-building corals can recover from bleaching events, others cannot, and their resilience is further weakened by other pressures, including pollution and overfishing. The Intergovernmental Panel on Climate Change (IPCC) has predicted that 70–90% of coral reefs will die off with even 1.5°C of global warming. The loss of some of the planet's most biodiverse ecosystems would have severe social and economic consequences. Approximately 330 million people depend directly on reefs for protection from storm surges, sources of food and livelihood, and other benefits.

In many cases, the balance is precarious - but tipping points can still be avoided. We have an opportunity to intervene now to increase ecosystem resilience and reduce the impacts of climate change and other stressors before these tipping points are reached.



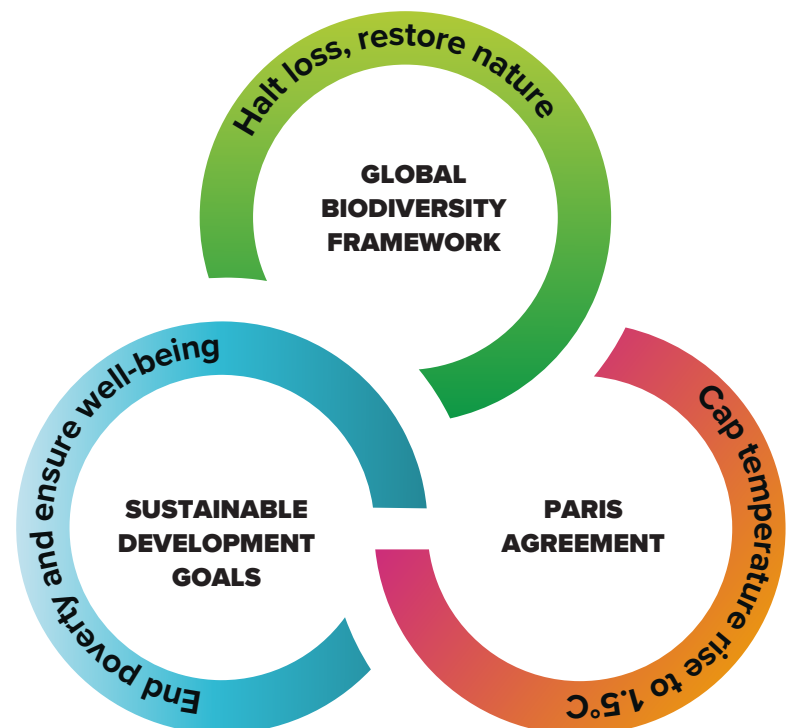
We are falling short of our global goals

The nations of the world have set global goals for a thriving, sustainable future, including halting and reversing the loss of biodiversity (under the Kunming-Montreal Global Biodiversity Framework, or GBF), capping global temperature rise to 1.5°C (under the Paris Agreement), and eradicating poverty and ensuring human well-being (under the Sustainable Development Goals, or SDGs). But despite these global ambitions, national commitments and actions on the ground fall far short of what's needed to meet targets for 2030 and avoid the tipping points that would make achieving the goals impossible. As things stand:

- **Over half the SDG targets for 2030 will be missed, with 30% of them stalled or getting worse from the 2015 baseline.**
- **National climate commitments would lead to an average global temperature increase of almost 3°C by the end of the century, inevitably triggering multiple catastrophic tipping points.**
- **National biodiversity strategies and action plans are inadequate and lack financial and institutional support.**

Approaching climate, biodiversity and development goals in isolation raises the risk of conflicts between different objectives – for example, between using land for food production, biodiversity conservation or renewable energy.

However, tackling the goals in a joined-up way opens up opportunities to simultaneously conserve and restore nature, mitigate and adapt to climate change, and improve human well-being.



Transformation and sustainable solutions

To maintain a living planet where people and nature thrive, we need action that meets the scale of the challenge. We need more, and more effective, conservation efforts, while also systematically addressing the major drivers of nature loss. That will require nothing less than a transformation of our food, energy and finance systems.

1 TRANSFORMING CONSERVATION

Protected areas currently cover 16% of the planet's lands and 8% of its oceans. The GBF calls for 30% of lands, waters and sea to be protected by 2030, and to restore 30% of degraded areas by 2030. Countries need to extend, enhance, connect and properly fund their systems of protected areas in a fair and inclusive way. Conservation efforts will only succeed in the long run if they take account of the rights, needs and values of Indigenous Peoples and local communities. More effective conservation outside of protected areas is also essential.

3 TRANSFORMING ENERGY

The way we produce and consume energy is the principal driver of climate change. We must rapidly transition away from fossil fuels to cut greenhouse emissions in half by 2030 and keep 1.5°C within reach. In the last decade, global renewable energy capacity has roughly doubled and costs for wind, solar and batteries have fallen by up to 85%. But although energy trends are going in the right direction, the pace and scale are not yet near where they need to be. Over the next five years, we need to triple renewable energy, double energy efficiency, and modernize energy grids for an energy transition that is fast, green and fair.

2 TRANSFORMING FOOD

Food production is one of the main drivers of nature's decline: it uses 40% of all habitable land, is the leading cause of habitat loss, accounts for 70% of water use and is responsible for over a quarter of greenhouse gas emissions. Coordinated action is needed to: scale up nature-positive production to provide enough food for everyone while also allowing nature to flourish; reduce food loss and waste; and increase financial support and foster good governance including by redirecting environmentally harmful subsidies.

4 TRANSFORMING FINANCE

Redirecting finance away from harmful activities and toward business models and activities that contribute to the global goals on nature, climate and sustainable development is essential. Globally, over half of GDP (55%) – or an estimated US\$58 trillion – is moderately or highly dependent on nature and its services. Yet our current economic system values nature at close to zero. *Financing green* involves mobilizing finance for conservation and climate impact at scale, while *greening finance* entails aligning financial systems to deliver nature, climate and sustainable development goals.

Transformative solutions for a livable planet



CONSERVATION

- Protected & other areas
- More inclusivity & equity
- Nature-based solutions



FOOD SYSTEM

- Nature-positive production
- Nutritious & healthy diets
- Reduce food loss & waste



ENERGY SYSTEM

- Phase out fossil fuels
- Renewables & efficiency
- Go faster, greener, fairer



FINANCE SYSTEM

- Redirect financial flows
- Mobilize finance for impact
- Align financial systems

#Act For Your Planet

Our actions now will determine the future of life on Earth. Climate change and nature loss mean we are threatened with catastrophic tipping points. We have 5 years to get the world on a sustainable trajectory. The risk of failure is real – and the consequences almost unthinkable. But there are solutions and many reasons to be hopeful. Together we have the power to change the systems and restore nature. There is a role for everyone - businesses, governments and you. No matter who you, you can make a difference.

Your food

- Choose sustainable ingredients. Get to know who produces your ingredients - and how!
- Eat more plants than animal products.
- Minimise processed foods, as these have worse environmental impacts.
- Go for balance and variety. Too much of any food is unlikely to be good for you or the planet.
- Reduce food waste.

Your donation

- Every day, all around the world, we're working to protect our planet.
- Together we can create sustainable systems and restore nature - preventing irreversible disaster.
- Together we can protect our forests, preserve our coral reefs and keep our rivers flowing.
- Together we can save vulnerable wildlife. There is still time.
- Your donations make it possible.

Your voice

- Right now is a critical time for our planet. Dangerous tipping points threaten us all. But it is also a very exciting moment...
- Governments & businesses have huge environmental commitments to keep by 2030. They can change the systems that determine the future of our planet.
- You can hold them accountable!
- Find out more about what your leaders have committed to for 2030 and what they are actually doing for the planet.
- Use your voice through petitions, activism & voting to push for real action.

Your community

- There's so much we can do together - with family, friends, colleagues, and neighbors.
- Discuss important topics.
- Join local clean-ups.
- Support eco-businesses.
- Create wildlife friendly green spaces.
- Watch out for emails from us for more ideas.



Stay tuned for more ways that you can #actforyourplanet.
We have just one living planet. Together, we can protect it.