

## BIODIVERSITY

# Time for a 'Paris Agreement for nature'

*The world needs a much more ambitious work plan to halt species loss and restore biodiversity. Here are three steps to get there*



## Story highlights

- Authors warn that without a dramatic change in efforts worldwide, our persistent failure to meet conservation and biodiversity targets will continue beyond 2020
- The declining trend of biodiversity must not only be halted but also reversed if the UN Sustainable Development Goals (SDGs) are to be achieved
- The authors suggest argues for more well-defined, ambitious and measurable targets for biodiversity, similar to the 1.5 to 2°C Paris climate agreement target

In November 2018, almost 200 countries will meet to start working on a new strategic plan for the UN Convention on Biological Diversity (CBD).

Now, over 25 years since the convention was founded, the need for a much more ambitious work plan to halt species loss and restore biodiversity is urgently needed. Over the years a range of international scientific studies and policy agreements have confirmed that conservation and

sustainable use of biological diversity is a global priority, but worldwide trends in biodiversity continue to decline.

"The degradation of nature is among the most serious issues that the world faces, but current targets and consequent actions amount, at best, to a managed decline," write a team of experts from a diverse set of institutions in the [latest issue of Nature Sustainability](#).

Centre researcher [Sarah Cornell](#) is one of the co-authors together with experts from University College London, WWF in the UK and the Netherlands, UN Environment World Conservation Monitoring Centre, Zoological Society of London, and the Natural History Museum in London.

"Without a dramatic change in efforts to reverse the on-going decline, our persistent failure to meet conservation and biodiversity targets is likely to continue beyond 2020, the end-date for the current round of international commitments for biodiversity," the authors write.

Some concrete numbers describing the above mentioned failure include an estimated 58% decline of vertebrate population sizes since 1970, and

about 13% average loss of local species diversity across the world since 1500. In total, the current rates of species extinction are 100 to 1,000 times higher than the natural extinction rate.

With a more comprehensive approach, different combinations of economic, technological and behavioural changes can be identified that contribute to meeting multiple SDGs simultaneously, avoiding trade-offs and emphasizing win-win actions

G. M. Mace, lead author

## Profound implications for the Sustainable Development Goals

The declining trend of biodiversity must not only be halted but also reversed if the UN Sustainable Development Goals (SDGs) are to be achieved, the authors say. This is by no means only a concern for the conservation movement.

Natural ecosystems have a critical role to play in everything from climate change mitigation and adaptation to maintaining the quality of soil, air and water. Biodiversity of genes, populations, species and ecosystems is a key aspect of these ecosystem services, not the least by supporting a resilient basis for the food, fuel and fibre for present and future generations of people. Failures to address biodiversity loss tend to hit the poorest hardest and most immediately, with profound implications for reaching the SDGs on poverty, hunger and more.

Given the growing needs to simultaneously avoid dangerous climate change, feed a growing population and restore biodiversity the authors call for cross-cutting solutions.

"We need solutions that enable our land and oceans to support all three objectives effectively and equitably, while recognising the interdependencies between them that offer opportunities as well as risks," they write.

### “A two degree goal for biodiversity”

The authors want to see more well-defined, ambitious and measurable targets for biodiversity and suggest three necessary steps in a roadmap for the post-2020 agenda:

(1) clearly specify the goal for biodiversity recovery

(2) develop a set of measurable and relevant indicators of progress

(3) agree a suite of actions that can collectively achieve the goal in the required timeframe

The first step, to specify the goal, should entail something similar to the well-known

1.5 to 2°C Paris climate agreement target. They propose adopting the CBD vision of sustaining a healthy planet that delivers essential benefits to all people by 2050 as a goal, including a new set of targets beyond 2020.

The second step, to identify measurable indicators, is more difficult than the Paris Agreement's greenhouse gas concentrations. Biodiversity measurement is complicated and requires multiple measures from local to global scales and for different ecological contexts. Progress can, however, be adequately represented using a collection of metrics that are already widely applied by science and policy, for example: the Red List Index, the Living Planet Index, and the Biodiversity Intactness Index (BII).

The third step, to identify concrete actions, should include traditional interventions such as protected areas and species conservation planning, and address major drivers of biodiversity loss. In this context, it is crucial to consider trade-offs and conflicts, for example between food production, conservation, and land needed for climate mitigation (biofuels and carbon sequestration).

"With a more comprehensive approach, different combinations of economic, technological and behavioural changes can be identified that contribute to meeting multiple SDGs simultaneously, avoiding trade-offs and emphasizing win-win actions," they write.

## Get involved

The authors conclude that sectors beyond governments, scientists and conservation groups must take urgent action if we are to bend the curve of biodiversity decline.

"The business and finance sectors, increasingly visible biodiversity actors, have the potential to become drivers of their reach is global and their decisions can address biodiversity impacts across the entire value chain and in all aspects of investment," they write.

But the authors also look themselves in the mirror, acknowledging that they can improve their assessments to better represent the ecological processes. Using biodiversity indicators in new combinations can help define pathways to achieve the goals. More comprehensive models will help in identifying potential win-win solutions and avoiding narrowed, one-sided strategies.

Furthermore, they recognize, the conservation community should come together around clear key messages related to biodiversity goals and the actions that are required to deliver them. The community can also play a more powerful role for the SDGs moving beyond the notion that single solutions can be enough, and instead promoting and supporting combinations of actions that long-term sustainability requires.

[Link to publication](#)