19 APRIL 2019

‘Global deal for nature’ fleshed out with specific conservation goals

To maintain a liveable planet, governments need to protect 30% of Earth’s land and sea and sustainably manage another 20%, say researchers.

Jeff Tollefson

Tropical forests, such as this one in Borneo, are among several types of ecosystems that scientists are pushing to conserve.Credit: Nick Garbbutt/NPL/Getty Images

Governments around the world must fully protect 30% of Earth’s surface and sustainably manage another 20% by 2030 if they’re to have a hope of saving ecosystems and limiting global warming, researchers have said in a new report. The recommendations are part of a fleshed out ‘global deal for

nature' — initially proposed[1] by researchers in 2017 as a companion to the Paris climate accord — that outlines what it will take to maintain a liveable planet.

The deal calls for formal protection or sustainable management of half of the planet's land and oceans by 2030, saying that conservation activities must go hand in hand with efforts to limit global warming to 1.5 °C above pre-industrial levels. In a paper[2] published on 17 April in *Science Advances*, researchers lay out what it will take to hit that target.

"What this paper is doing is putting a hard lens on what really needs to be protected," says Jane Smart, who leads biodiversity and species conservation programmes at the International Union for Conservation of Nature in Gland, Switzerland.

The publication comes just weeks before an international panel convened under the United Nations is set to release an assessment of global biodiversity and ecosystem services — the most comprehensive of its kind in nearly 15 years. It also comes a year before governments will meet to discuss conservation targets for the coming decade under the Convention on Biological Diversity (CBD).

Targeting ecosystems

The scientists called for doubling the area of fully protected regions on land, such as tropical forests and grasslands, and a roughly five-fold increase in the extent of marine protected areas. Efforts to manage ecosystems sustainably should go beyond governments and involve groups that would be affected by conservation policies, including businesses, local communities and Indigenous people, the researchers write.

If humanity moves quickly, it can achieve the goals of the Paris climate accord while also slowing the rate of species extinctions, says lead study author Eric Dinerstein, a wildlife scientist at the conservation group RESOLVE in Washington DC.

Many of the most biodiverse areas are concentrated in relatively small regions across the tropics. But Dinerstein and his colleagues argue that a proportion of all major ecosystems, such as mangroves and tundra, must be preserved if the planet is to continue to provide humanity with services such as fresh water, coastal protection and carbon storage.

Rallying humanity

The study aligns global conservation and climate-change agendas while providing details that governments can use to create real conservation targets, says Smart. She adds that the current CBD targets — which call for protecting 17% of the land and 10% of the ocean by 2020 — are too vague, and can result in governments creating protected areas that don't do much for the climate or biodiversity.

But others worry that the message is still too aspirational to make a practical difference to some of the most important and threatened habitats on the planet. "I sort of worry that we are misleading the politicians," says Stuart Pimm, an ecologist at Duke University in Durham, North Carolina. "It sounds good, and it looks good in the media, but in fact it's not the kind of detailed conservation planning that we really need."

Dinerstein says the work provides an initial road map for what needs to be done, but a global movement is needed to convince governments and the private sector to act. "I think we have the science now," he says. "We need to rally humanity to step up."

doi: 10.1038/d41586-019-01253-z

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