

CLIMATE

Climate Change Is Becoming a Top Threat to Biodiversity

Warming rivals habitat loss and land degradation as a threat to global wildlife

By Chelsea Harvey, E&E News on March 28, 2018



Credit: Ricardo Funari Getty Images

Climate change will be the fastest-growing cause of species loss in the Americas by midcentury, according to a new set of reports from the leading global organization on ecosystems and biodiversity.

Climate change, alongside factors like land degradation and habitat loss, is emerging as a top threat to wildlife around the globe, the reports suggest. In Africa, it could cause some animals to decline by as much as 50 percent by the end of the century, and up to 90 percent of coral reefs in the Pacific Ocean may bleach or degrade by the year 2050.

The reports, released last week by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), included a sweeping set of biodiversity assessments for four major regions around the world, with contributions from more than 500 experts. A separate report on global land degradation, which was launched yesterday, included more than 100 authors. Both were approved by IPBES's 129 member states at an ongoing plenary session in Medellín, Colombia.



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Numerous other threats still challenge the world's biodiversity, from pollution and overexploitation to land-use change and habitat loss, and in many places these are still greater immediate dangers to the world's wildlife than climate change. But the new series of reports emphasize that action on global warming is also action in favor of wild plants and animals. And in turn, protecting the world's remaining natural places is also a step toward safeguarding the climate.

"Land degradation, biodiversity loss and climate change are three different faces of the same central challenge: the increasingly dangerous impact of our choices on the health of our natural environment," IPBES Chairman Robert Watson said in a statement. "We cannot afford to tackle any one of these three threats in isolation—they each deserve the highest policy priority and must be addressed together."

According to yesterday's report, the degradation of land—either by human activities or by natural disasters—may be adversely affecting more than 3 billion people around the globe. And the resulting losses in biodiversity and ecosystem services may be costing 10 percent of the world's annual global gross product.

Land degradation is also a significant contributor to climate change, the report warns. Deforestation, the destruction of wetlands and other forms of land conversion can release massive amounts of carbon into the atmosphere, which may worsen global warming. Climate change can continue the cycle by thawing out frozen ecosystems, creating harsher conditions for vegetation to survive, and increasing the severity of storms and other natural disasters, which can also damage natural landscapes.

The upside of linked stressors is that addressing one can help the other. Working to protect natural landscapes can play a significant role in the fight against climate change, the report suggests. Restoring natural lands or preventing them from being destroyed in the first place could deliver more than a third of the action needed by 2030 to keep global warming to below 2 degrees Celsius, the authors note.



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And that's a big step in preserving the world's biodiversity, as well, according to the four reports released last week. While each report focused on a different region of the world—Africa, Europe, the Asia-Pacific region and the Americas—each one highlighted the growing threat of climate change, among a variety of other human-caused threats to global wildlife.

Africa is particularly vulnerable, the reports suggest, with some bird and mammal species facing declines of up to 50 percent if serious action isn't taken. Africa's lakes could also see declines in productivity of up to 30 percent by the end of the century.

Other global regions are facing major risks, as well. In the Americas, about 31 percent of all indigenous species are believed to have been lost since European settlers first arrived. Under a “business-as-usual” trajectory, and accounting for other threats, such as habitat loss, the report suggests that this number could climb as high as 40 percent by 2050.



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