



## A PLAN TO PROTECT AT LEAST 30 PERCENT OF OUR PLANET BY 2030

Nature around the world is in a state of crisis. Global wildlife populations have declined dramatically, and we are rapidly losing species to extinction. This crisis is as urgent a threat to the planet and to people as the climate crisis, and each challenge contributes to the other.

The well-being of humankind depends on solving this problem and preventing natural systems from collapsing. Without enough of nature protected, we will lose many of the services that provide the foundation for our society and risk the loss or deterioration of our food sources, our clean water, and our stable climate.

Fortunately, we are on the cusp of a critical opportunity for coordinated global action to safeguard nature and humanity's future. As a first step toward solving the nature crisis, global leaders should commit to protecting at least 30 percent of the planet by 2030.







PHOTO BY RONALD CATPO, AMAZON CONSERVATION ASSOCIATION (ACA

### THE BIODIVERSITY CRISIS

Earth's huge loss of nature and its diversity— "biodiversity" as it is known—is manifest in a major extinction crisis.¹ This extinction event is unlike any in the history of the planet. It is happening within decades instead of millennia and it is the direct result of human activities.² The current rate of global species loss is estimated to be up to 1,000 times higher than the naturally occurring extinction rate, and it is expected to rise even higher.³

Huge numbers of species are already on the path to extinction, including 14 percent of birds, 25 percent of mammals, and 40 percent of amphibians.<sup>4</sup>

Some of the key factors contributing to species extinction include habitat loss, pollution, overexploitation, invasive species, and climate change.<sup>5</sup> These problems are man-made—human activities are driving losses in countless species, placing large numbers on a rapid path to extinction. Unfortunately, the risks of this crisis aren't confined to the future. We are already witnessing startling impacts from the loss of animal populations,<sup>6</sup> intact forests,<sup>7</sup> and fisheries we depend on.<sup>8</sup>

# WHY PEOPLE SHOULD CARE ABOUT BIODIVERSITY AND PROTECTED AREAS

The biodiversity crisis directly threatens human well-being through the loss of a wide variety of nature's services, many of which we cannot live without. Forests sequester carbon and purify air and water,<sup>9</sup> fish provide the main source of animal protein to one billion people,<sup>10</sup> natural compounds lead to the creation of our most popular medicines, and a third of the world's food crop depends on natural pollinators.<sup>11</sup> Scientists estimate the total value of the services nature provides to humanity to be about US\$125 trillion per year. As a comparison, global gross domestic product is around US\$75 trillion per year.<sup>12</sup>

Humans are already seeing tangible consequences of the rapid erosion of biodiversity. Pollution, overfishing, and invasive species are threatening the livelihood of communities that depend on fishing;<sup>13</sup> the destruction of coastal forests is leaving people more vulnerable to hurricanes,<sup>14</sup> cyclones, and tsunamis;<sup>15</sup> and the loss of pollinators is even forcing some communities to pollinate their plants by hand.<sup>16</sup> Losing nature involves high economic and social costs as well as an environmental one.

Though conservation is effective at mitigating biodiversity loss, the scale at which it has been implemented has been inadequate to reverse these worrying trends. We need to protect more of nature, and the most important tool at our disposal is creating protected areas.





PHOTO BY TIM CALVER

## 2020: THE YEAR TO SAFEGUARD NATURE

Global leaders will soon have the opportunity to dramatically raise targets for land and ocean protection. These targets are primarily set under the Convention on Biological Diversity (CBD). Launched in Rio de Janeiro in 1992, the CBD is the world's bedrock international agreement addressing the biodiversity crisis and its threat to humanity.<sup>17</sup>

The CBD convenes parties every two years to review progress and set new priorities. In 2010 in Aichi Prefecture, Japan, the parties to the CBD agreed to a strategic plan to safeguard biodiversity, including Aichi Target 11, which called for the protection of at least 17 percent of terrestrial and 10 percent of marine areas by 2020. So far, about 15 percent of Earth's land and 7.4 percent of its marine area 19 has been protected.

Although a laudable step in the right direction, the Aichi Biodiversity Targets were designed as interim goals to halt biodiversity loss and do not represent what is actually required for humanity to live in sustainable harmony with nature. That is why the next two years represent such an important opportunity to scale up conservation efforts. Through the CBD process, countries have the chance to agree to targets that can finally give nature adequate protection. The next Conference of Parties will be held in Beijing, China, in 2020 and will focus on the post-2020 agenda. The next Conference of Parties will be held in Beijing, China, in 2020 and will focus on the post-2020 agenda.



PHOTO BY MICHAEL NICHOLS

#### PROTECTING AT LEAST 30 PERCENT OF THE WORLD'S LAND AND WATER BY 2030

An abundance of new scientific evidence confirms that the biodiversity crisis is worsening. Scientists have united around two crucial points on a revised global protected area target. First, there is a strong scientific consensus that the 17 percent terrestrial and 10 percent marine coverage outlined in Aichi Target 11 is wholly inadequate if comprehensive biodiversity protection is the goal.<sup>22</sup> Second, though opinions differ regarding the details of implementation, many scientists have united around the call for 30% percent our ocean and land to be protected by 2030—a "30 by 30" target for both land and sea—with the goal of securing 50 percent by 2050.

An unprecedented call to action: Recognizing the urgency of the situation, over 15,000 scientists signed and distributed a global notice in 2017 outlining the severity of the biodiversity crisis and the need for a significant course change from the status quo.<sup>23</sup> This is the largest number of scientists ever to cosign and formally support a published journal article.

Scientific surveys show support for bold targets: The World Commission on Protected Areas Beyond the Aichi Targets Task Force<sup>24</sup> recently surveyed scientists from 81 countries to synthesize expertise on global conservation targets ahead of the upcoming CBD meetings. The results show that there is strong support among scientists across the board for area-based conservation, using large area-based global targets, and the need to scale up conservation far beyond Aichi 11's numbers.<sup>25</sup>

Support exists in the scientific literature: One paper analyzing a set of studies and reviews concluded that 25-75 percent of a typical region must be managed for conservation in order to meet nature conservation goals. <sup>26</sup> In addition, a recent comprehensive literature review assessed nearly 130 studies related to marine protected areas to determine the total theoretical percentage of the ocean needed to achieve conservation-related goals and found an average of 37 percent. The authors conclude that Aichi Target 11's 10 percent marine target is only a waypoint toward effective ocean protection, not an endpoint. <sup>27</sup>

Wide-ranging calls for at least 30% percent: World-renowned scientists such as E. O. Wilson are calling for the protection of half of the Earth to save species and preserve our planet. 28 Similarly, a large international coalition of scientists, conservationists, indigenous leaders, nonprofits, and public officials have formed Nature Needs Half, which calls for protecting half of the Earth to safeguard nature "at the scale she needs." 29 Most agree that a strong near-term step in that direction is a commitment by nations to adopt a 30 percent protected area target by 2030.

Momentum building in the multilateral and governmental realm: In 2014, the coalition at the once-a-decade IUCN World Parks Congress delivered a decision known as the "Promise of Sydney." The primary recommendation was to create a fully sustainable ocean, with at least 30 percent completely protected and free from extractive activities. In June 2018, the German parliament unanimously passed a resolution calling for the protection of 30 percent of the global sea by 2030, which will become the German government's formal position during the upcoming Convention on Biological Diversity Conference of the Parties. Then, in September, the United Kingdom took a historic step and did the same, calling for 30 percent global marine protected area coverage by 2030.



#### DEAL FOR NATURE

It is clear that an international groundswell is building for a substantial increase in the world's commitment to protect biodiversity. As global leaders start to consider what a Global Deal for Nature should look like, it is important to remember that protected areas alone won't safeguard biodiversity. It is essential that many other strategies and conservation actions accompany them, including effective action on climate change and sustainable management of places outside of protected areas. However, protected areas are a major component of any successful biodiversity conservation approach.

In addition, indigenous rights and indigenous land conservation must also play a central role in any global biodiversity agreement. Much of the world's biodiversity is found on indigenous lands,<sup>33</sup> and traditional knowledge is essential to guiding conservation strategy.<sup>34</sup> Increased financial commitments and new mechanisms to equitably and effectively distribute financial resources are desperately needed to help communities and developing countries fund protections and management of areas.<sup>35</sup> Wealthier nations, corporations, and philanthropists have a responsibility to substantially increase financing to help secure a Global Deal for Nature. For more information, visit wysscampaign.org.



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#### ENDNOTES

1 Gerardo Ceballos, et al, "Biological Annihilation via the Ongoing Sixth Mass Extinction Signaled by Vertebrate Population Losses and Declines," *PNAS*, 114, no. 30 (May 23, 2017, www.pnas.org/content/114/30/E6089.full.

2 Mark Williams, et al, "The Anthropocene Biosphere," *Sage Journals*, 2, no. 3, (June 18, 2015) 196-219, journals.sagepub.com/doi/10.1177/2053019615591020.

3 Jurriaan M. De Vos, et al, "Estimating the Normal Background Rate of Species Extinction," *Conservation Biology*, 29, no. 2 (August 26, 2014) 452-462, doi:10.1111/cobi.12380.

4 "Summary Statistics," The IUCN Red List of Threatened Species, International Union for Conservation of Nature (IUCN), www.iucnredlist.org/resources/summary-statistics.

5 Richard Burkmar, and Charlie Bel, "Drivers of Biodiversity Loss: A Research Synthesis for the Tomorrow's Biodiversity Project," Field Studies Project, March 13, 2015, www.tombio.uk/sites/default/files/TomBioDrivers.pdf.

6 WWF International, Living Planet Report 2016: Risk and Resilience in a New Era, awsassets.panda.org/downloads/lpr\_living\_planet\_report\_2016.pdf.

7 Morgan Erickson-Davis, "'We Need to Act': Scientists Urge Prioritization of Intact Forests," *Mongabay, Conservation News,* February 26, 2018, news.mongabay.com/2018/02/huge-gamble-scientists-urge-prioritization-of-intact-forests/.

8 Boris Worm, et al, "Impacts of Biodiversity Loss on Ocean Ecosystem Services," *Science*, 314, no. 5800 (November 3, 2006) science. sciencemag.org/content/314/5800/787?ijkey=a22199a0d10e-8ba572c7812ebb220f7a6da1a442&keytype2=tf\_ipsecsha.

9 Eric Chivian, editor, *Biodiversity: Its Importance to Human Health, Interim Executive Summary,* Harvard Medical School, 2002, www.utta-yarndham.org/sites/default/files/3\_biodiversity\_v2\_screen\_0\_0.pdf. 10 "Global and Regional Food Consumption Patterns and Trends," World Health Organization, August 6, 2008, www.who.int/nutrition/topics/3\_foodconsumption/en/index5.html.

11 Chivian, *Biodiversity: Its Importance to Human Health*.
12 Robert Costanza, et al, "Changes in the Global Value of Ecosystem Services," *Global Environmental Change 26* (April 1, 2014) https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/article-costanza-et-al.pdf

13 Chivian, Biodiversity: Its Importance to Human Health.

14 Y. Peter Sheng, and Ruizhi Zou, "Assessing the Role of Mangrove Forest in Reducing Coastal Inundation During Major Hurricanes," *Hydrobiologia 803, no. 1 (November 2017): 87-103.* 

15 Kandasamy Kathiresan, and Narayanasamy Rajendran, "Coastal Mangrove Forests Mitigated Tsunami," *Estuarine, Coastal and Shelf Science* 65, no. 3 (November 2005): 601-606, www.sciencedirect.com/science/article/pii/S0272771405002246; SaudaminiDas, and Jeffrey R. Vincent, "Mangroves Protected Villages and Reduced Death Toll During Indian Super Cyclone," *PNAS* 106, no. 18 (May 5, 2009): 7537-7360, www.pnas.org/content/106/18/7357.short.

16 Uma Partap, et al, "Pollination Failure in Apple Crop and Farmers' Management Strategies in Hengduan Mountains, China," Acta Horticulturae 561, no. 32 (2001): 225-230, www.ishs.org/ishs-article 17 "History of the Convention," Convention on Biological Diversity, United Nations Environment, www.cbd.int/history/default.shtml.

18 "The Lag Effect in the World Database on Protected Areas," Protected Planet, https://www.protectedplanet.net/c/the-lag-effect-in-the-world-database-on-protected-areas

19 "Explore the World's Marine Protected Areas," Protected Planet, www.protectedplanet.net/marine.

20 "The Promise of Sydney," IUCN, October 17, 2017, www.iucn.org/theme/protected-areas/about/promisesydney.

21 United Nations Environment World Conservation Monitoring Centre, The 2020 Biodiversity Strategic Planning Timeline, post2020. unep-wcmc.org/

22 Harvey Locke, "IUCN WCPA Beyond the Aichi Targets Task Force Report," Beyond Aichi Targets Task Force, unpublished presentation. 23 William J. Ripple, et al, World Scientists' Warning to Humanity: A Second Notice. BioScience 67, no. 12 (December 1, 2017): 1026-1028, scientistswarning.forestry.oregonstate.edu/sites/sw/files/Warning\_article\_with\_supp\_11-13-17.pdf.

24 "Beyond the Aichi Targets," IUCN, June 6, 2018, www.iucn.org/theme/protected-areas/wcpa/what-wedo/beyond-aichi-targets. 25 Harvey Locke, "IUCN WCPA Beyond the Aichi Targets Task Force Report."

26 Reed F. Noss, et al, "Bolder Thinking for Conservation," *Conservation Biology* 26, no. 1, (*February 2012*): 1-4, onlinelibrary.wiley.com/doi/full/10.1111/j.1523-1739.2011.01738.x.

27 Bethan C. O'Leary, et al, "Effective Coverage Targets for Ocean Protection," *Conservation Letters*, 9, no. 6, (March 2016): 398-404, onlinelibrary.wiley.com/doi/full/10.1111/conl.12247.

28 "Half-Earth: Our Planet's Fight for Life," EO Wilson Biodiversity Foundation, https://eowilsonfoundation.org/half-earth-our-planets-fight-for-life/

29 "Home," Nature Needs Half, natureneedshalf.org/ 30 "World Parks Congress Recommends Target of 30% No-Take MPA Coverage," MPA News, December 31, 2014, https://mpanews.openchannels.org/news/mpa-news/world-parks-congress-recommends-

31 Deutscher Bundestag, Antrag Der Fraktionen CDU/CSU, SPD, FDP Und BÜNDNIS 90/DIE GRÜNEN: Meeresschutzgebiet Im Weddellmeer Der Antarktis, June 26, 2018, dipbt.bundestag.de/doc/btd/19/029/1902985.pdf.

target-30-no-take-mpa-coverage-worldwide

32 "In Boost to Ocean Conservation, UK to Call for 30 per cent of Seas to Be Protected by 2030," United Nations Environment, September 25, 2018, https://www.unenvironment.org/news-and-stories/story/boost-ocean-conservation-uk-call-30-cent-seas-be-protected-2030 33 Victor M. Toledo, "Indigenous Peoples and Biodiversity." National Autonomous University of Mexico, January. 1999, https://www.researchgate.net/publication/255585922\_Indigenous\_Peoples\_and\_Biodiversity. 34 Madhav Gadgil, et al, "Indigenous Knowledge for Biodiversity Conservation," *Ambio* (May 1993), https://www.jstor.org/stable/4314060?seq=1#page\_scan\_tab\_contents.

35 Andrew Balmford, et al, "Global Variation in Terrestrial Conservation Costs, Conservation Benefits, and Unmet Conservation Needs," *Proceedings of the National Academy of Sciences*, 100, no. 3 (January 27, 2003); Donal P. McCarthy, et al, "Financial Costs of Meeting Global Biodiversity Conservation Targets: Current Spending and Unmet Needs," 338, no. 946 (October 4, 2012) science.sciencemag.org/content/338/6109/946.