

Half-Earth Project: Impact Report 2020-2021

Thank you for joining us in our shared endeavor to protect half of Earth’s lands, waters and seas so that all life has what it needs to persist and flourish. While the magnitude of the strain on our environment from the Australian savanna to the Canadian Arctic tundra can seem overwhelming, at the E.O. Wilson Biodiversity Foundation we believe we have a chance to protect sufficient habitat to safeguard the long-term health of our planet and **leave no species behind**. But we can’t do it without you. In a year of immense challenges, we are grateful for your commitment to the future of our planet. We are proud to report that this year we continued to add to and refine the Half-Earth Project Map, inspired students and teachers during a challenging time for education, supported essential environmental policy in the U.S. and globally and much more. In this report you will find highlights from the past year, made possible because of you. Thank you for your generous, continued and vital support. Together, we can ensure we achieve the goal of Half-Earth and leave no species behind.

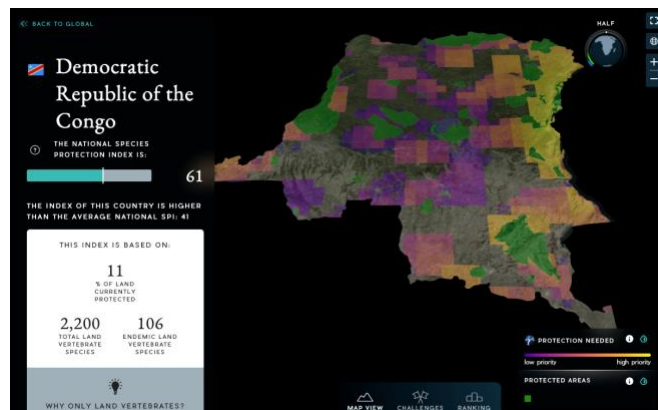
By the Numbers

- 17.6k unique visitors to the Half-Earth Project Map in 2020
- 1,000 attendees and 17K online visitors to Half-Earth Day 2020
- An additional 5,355 species of marine fishes added to the Half-Earth Project Map
- 800 Half-Earth Project Educator Ambassadors
- 252 Half-Earth Map National Report Cards issued
- 65% increase in new donors

Protecting Half the Land and Sea Through Science, Education and Constituency-Building

The Half-Earth Project Map and Science

The Half-Earth Project Map is helping scientists, governments and citizens understand where we must protect habitat so we can preserve our biological heritage. The E.O. Wilson Biodiversity Foundation is building on cutting-edge science, analytics and technology, to map the distribution of species across the globe and identify the



places where we can protect the highest number of species. We have the opportunity to support the most biodiverse places in the world as well as the people who call these paradises home.

Select Publications

- “Shortfalls and opportunities in terrestrial vertebrate species discovery,” by Mario Moura and Walter Jetz, Scientific Chair for the E.O. Wilson Biodiversity Foundation, published in *Nature Ecology & Evolution* on March 22, 2021.
- *Science* featured Moura and Jetz’s paper in an article titled, “Itching to discover a new species? Follow this map,” published March 22, 2021.
- “Limited protection and ongoing loss of tropical cloud forest biodiversity and ecosystems worldwide,” by Walter Jetz et. al, is forthcoming in *Nature Ecology & Evolution*.

Select Presentations

- Paula Ehrlich, President & CEO of the E.O. Wilson Biodiversity Foundation, was a featured speaker in October at the virtual Expo 2020 Dubai’s Climate and Biodiversity Week, which aims to provide a global forum for discussion, collaboration and agreement on some of the biggest challenges facing humanity.
- In December, Dr. Ehrlich joined Gavin Edwards, Global Coordinator of The New Deal for Nature and People 2020 at the World Wildlife Fund, at the Domini Impact Investments Community Forum hosted by Corey Klemmer for *Saving Biodiversity, Our Next Big Challenge*. They discussed the role of biodiversity in maintaining the balance of our ecosystems and the role corporations, governments and investors can play to preserve biodiversity. You can watch the [discussion here](#).

Recently, we have added important updates to the biodiversity layers in the Half-Earth Project Map. The Map now features new layers of global priority areas for biodiversity conservation. For example, the patterns of marine richness and rarity have been updated to include separate layers for marine mammals and to include an additional 5,355 species of marine fishes. Furthermore, layers that depict marine human modification, such as commercial and noncommercial fishing, are now available. Other taxonomic groups in the queue to be added include butterflies, dragonflies, damselflies, select vascular plants and ants.

The Half-Earth Map National Report Cards

The most recent update to the Half-Earth Project Map introduces the National Report Cards and Species Protection Index, which measure how many species groups are protected by each country’s conservation efforts, focusing at the national level on how well conserved places are doing in protecting the species within their borders. In addition, the National Report Cards provide information on what places should be prioritized for conservation next in order to increase each nation’s contribution to global biodiversity protection.

Chairs and Scholars: Engaging the world’s brightest minds in biodiversity research and conservation

The Half-Earth Chairs and Scholars program is fostering the next generation of conservation scientists and leaders, supporting biodiversity research, mentoring scholars and next-generation stewards, and providing regionally relevant expertise

to engender and connect conservation efforts worldwide. Right now, our Half-Earth Chair in Gorongosa, Piotr Naskrecki, is working to expand Mozambican student participation in research and scholarship at the E.O. Wilson Biodiversity Laboratory at Gorongosa National Park through a Half-Earth Project Fellowship program. Gorongosa National Park is a 4,000-square-kilometer preserve located at the southern end of the Great East African Rift Valley in the nation of Mozambique. The 3-month fellowship

will train Mozambican researchers and recent graduates in advanced taxonomy and biodiversity exploration. The first iteration of the training, offering full support to Mozambican participants, will focus on the taxonomy, identification and biogeography of vascular plants.



***Half-Earth Project Educator Ambassadors:
Fostering a diverse community of educators
and inspiring young people***

The Half-Earth Project Educator Ambassador Program provides a platform for teachers to engage each other and their students in the grand ambition of Half-Earth, and to inspire and connect students with the natural world. During a year when education was disrupted for so many households, the E.O. Wilson Biodiversity Foundation’s education programs sought to

support teachers and augment potential learning-loss. We hosted online learning institutes and workshops for students and educators, for example interactive sessions with several hundred elementary and middle school students, and numerous professional learning institutes for educators in partnership with the Field Museum of Natural History and the North American Association of Environmental Educators.

Additionally, we continued to develop new lesson plans and resources for educators. For example, we released a new series that explores the role of spatial planning science in achieving the goal of Half-Earth. Dennis Liu, Vice President of Education for the E.O. Wilson Biodiversity Foundation, presented at the National Association of Biology Teachers annual meeting alongside three Half-Earth Project Master Ambassadors. The presentation focused on a guided inquiry into Hummingbirds using the Half-Earth Project Map.

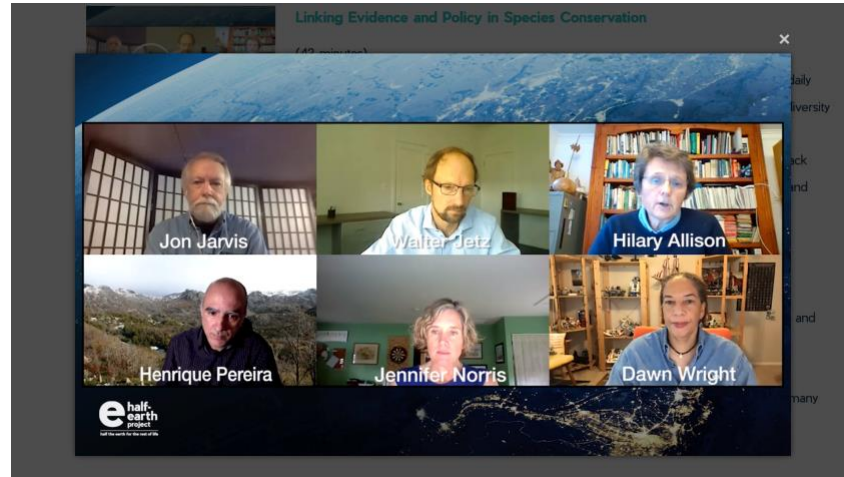
E.O. Wilson Continues to Lead a Global Discussion on Biodiversity

In August 2020, E.O. Wilson’s latest book, *Tales from the Ant World*, was released. In it, he recalls his lifetime with ants. He takes readers on a myrmecological tour to such far-flung destinations as Mozambique and New Guinea, the Gulf of Mexico’s Dauphin Island and even his parent’s overgrown backyard, thrillingly relating his nine-decades-long scientific obsession with more than 15,000 ant species.

Additionally, his memoir *Naturalist*, has been adapted by *New York Times* bestselling comics writer Jim Ottaviani and illustrator C.M. Butzer into a graphic edition. It brings Wilson’s childhood and celebrated career to life through dynamic full-color illustrations and Wilson’s own lyrical writing.

Half-Earth Day 2020

Half-Earth Day® brings together people from around the world and across disciplines to share their unique perspectives and thought leadership on how we can work together to achieve the goal of Half-Earth and ensure the health of our planet for future generations. The virtual format mandated by this past pandemic year facilitated participation by more than 1,000 real-time attendees and 17,000 online visitors to the webpage. You can [view content and videos here](#).



Key sessions included:

- **Igniting Change** hosted and moderated by Glenn Close, in conversation with E.O. Wilson, Hansjörg Wyss, Kris Tompkins, Reggie Love, Jacob Lebel, Jaime Butler and Jeff Ubben. In this panel discussion, thought leaders from diverse sectors – including conservation, philanthropy, politics, policy and youth activism – addressed how we can best convene and empower collaborative community conservation actions.
- **The Contribution of Cities to Half-Earth**, led by Tim Beatley, Founder & Executive Director of Biophilic Cities and Teresa Heinz, Professor of Sustainable Communities, University of Virginia, explored the importance of helping biodiversity flourish in urban environments as well as how important it is for urban youth to experience nature where they live.
- **Exploring by the Seat of Your Pants – Conservation in the Classroom** featured Joe Grabowski, Founder of Exploring by the Seat of Your Pants, who discussed how his organization brings conservation scientists live into classrooms around the world, elevating student curiosity and their understanding of the breadth of life in the world around them. Using two-way live-streaming satellite video technology, students experience the breadth of life on our planet.

Reaching for 30x30: Linking Evidence and Policy in Species Conservation

Countries are stewards of their biodiversity, and their institutions are at the frontline of daily conservation decisions. This year, the current set of global goals to end biodiversity loss and restore ecosystems will expire, creating an opportunity to set new ambitious goals, including 30x30: the extraordinary global campaign to protect 30 percent of Earth's total surface from human exploitation by 2030. Half-Earth Day hosted a panel discuss of experts who discussed the opportunities for science to track international policy targets and to support regional conservation decisions.

Moderated by Walter Jetz, Scientific Chair for the E.O. Wilson Biodiversity Foundation, the session featured Hilary Allison, Head of the Ecosystem Assessment and Policy Support Programme at UNEP-WCMC; Jon Jarvis, Executive Director of the Institute for Parks, People and Biodiversity at the University of California, Berkeley; Jennifer Norris, Deputy Secretary for Biodiversity & Habitat, California Natural Resources Agency; Henrique Pereira, Co-Chair GEO Biodiversity Observation Network and Professor of Biodiversity Conservation, iDiv Germany; and Dawn Wright, Esri Chief Scientist and E.O. Wilson Biodiversity Foundation Board Member.

Supporting Environmental Policy that Promotes Species Conservation

The E.O. Wilson Biodiversity Foundation supports policy and initiatives that provide solutions to the long-standing global environmental crises of climate change and biodiversity loss. This year we joined in supporting:

- A letter to the President of the 2021 United Nations Climate Change Conference, also known as COP26, in which 20 organizations outlined **evidence-based guidelines for Nature-Based Solutions to climate change** and urged COP26 to commit to four principles including cutting emissions, conserving and protecting existing ecosystems, being socially responsible and being ecologically responsible.
- **The Great American Outdoors Act**, which establishes the National Parks and Public Land Legacy Restoration Fund to support deferred maintenance projects on federal lands and makes funding for the Land and Water Conservation Fund (LWCF) permanent.
- **The Wildlife Corridors Conservation Act**, which provides for the conservation and restoration of habitats that facilitate the movement of certain native species that may be at risk due to habitat loss or fragmentation.

“One word: Poetry. That’s what the world has to offer us. A whole series of mysteries, of possible discoveries, of phenomena, of unexpected events, and objects, and things, and living organisms and so on. An infinitude, almost, on this planet, waiting out there to be enjoyed.” – E.O. Wilson

Building a Strong Organization

Ensuring Equitable Participation—Justice, Equity, Diversity and Inclusion in decision-making related to biodiversity

At the E.O. Wilson Biodiversity Foundation, we acknowledge that centuries of racism, violence, discrimination and marginalization have obstructed participation of Black, Latinx, Indigenous and Asian people and communities of color in conservation globally. Further, we recognize that the same people who have been systemically excluded from the process are disproportionately hurt by degraded air, lands and waters, perpetuating a cycle of harm and exclusion. We recognize the obligation inherent in that intersection with respect to our mission. Our first step has been to understand that we cannot achieve our mission without recognizing and working actively to address human inequities, which has been the foundation for our plan on Justice, Equity, Diversity and Inclusion (JEDI). Our approach is to prioritize listening, learning and showing over telling, to prioritize doing over planning. [Read the full statement here.](#)

New Champions of Biodiversity Join Our Team

In the last year, the foundation added four new members to the Board of Directors:

- **Caryl Hart** is Commissioner, California Coastal Commission appointed by Speaker Anthony Rendon in 2019, and currently serves as Interim General Manager of the Sonoma County Agricultural and Open Space District.

- **Dr. Stephen H. Lockhart** is a board-certified anesthesiologist, and Vice President and Chief Medical Officer for Sutter Health in Northern California (retired).
- **Keith Tuffley** is Global Co-Head of the newly launched Sustainability & Corporate Transitions group at Citi, leading Citi's ESG engagement with its corporate clients.
- **Dr. Dawn Wright** is Chief Scientist of the Environmental Systems Research Institute (Esri), a world-leading geographic information system (GIS) software and data science company.

The foundation also appointed two new executive staff:

- **Joel R. Johnson** was appointed to lead brand marketing, communications and editorial to raise the visibility of the Foundation and The Half-Earth Project. Most recently, Joel was a founding partner in ad agency Admirable Devil, and Chief Marketing Officer of Trout Unlimited, the largest coldwater conservation organization in the U.S.
- **Amy Tidovsky** was appointed to lead fundraising in support of the foundation's mission, strategies and projects. Previously, Amy spent more than 20 years with The Nature Conservancy, working on global philanthropy in major and principal gifts fundraising.

Looking Forward

We know that even with all of these activities and accomplishments, we are still in the early stages of the journey to Half-Earth. Looking forward, 2021 will be one of the biggest years for biodiversity action, and the E.O. Wilson Biodiversity Foundation will be present to share scientific understanding, to call for action to ensure healthy lands, waters and seas and to inspire others to join us. In 2021, the United Nations Convention on Biological Diversity will be held in Kunming, China. It will be a significant event focused on adopting new goals for biodiversity protection, goals that can help move us closer to Half-Earth and to preserving the integrity of ecosystems on which we all depend, providing safe havens to help wildlife adapt to climate change, and sustaining natural systems that store carbon, such as forests, mangroves, seagrasses, wetlands and grasslands.

The importance of bringing diverse people and perspectives together will be paramount as we work together to leave no species behind. With your help, this year could see a significant shift in collective action to save the biosphere. We look forward to continuing to work together to create a better, healthier future for our planet—and for ourselves.

Mark Your Calendar

**Library of America presents
E.O. Wilson: An Earth Day Tribute**
Thursday, April 22 at 6pm ET
A virtual conversation with
acclaimed authors, filmmakers and
scientists

Celebrating Diversity in Alabama
May 6 at Noon ET, virtual event

Half-Earth Day 2021
October 21-22
Events held in London, including a
special conversation between E.O.
Wilson and Sir David Attenborough

Thank You

Ultimately, the Half-Earth Project aims to inspire a global movement that translates scientific leadership into conservation action. With science at its core and our moral obligation to the rest of life at its heart, Half-Earth is inspiring scientists, teachers, students, businesses and communities to raise their conservation efforts to a new level. We believe that a healthy planet is not only visionary and inspiring, it is within reach. Thank you for your support and for helping protect the ecosystems that sustain our lives. Thank you for being a part of the Half-Earth Project.

