

Reversing Biodiversity Collapse and Slowing Climate Change: In Saving the Earth, We Save Ourselves

1. Last year alone, the 20 largest climate-fueled disasters in the U.S. caused **\$145 billion in damage, and the loss of 688 lives**. Countless numbers of other living creatures, including birds and pollinators, were also destroyed, along with their habitats. Biodiversity loss is one of the top threats to humanity in the next 10 years, according to the World Economic Forum's *Global Risks Report 2023*, which reports that **more than a million species could be faced with extinction**. These are species we depend on for crucial services, such as pollinating crops, fighting the spread of disease or helping clean our water, says The Nature Conservancy, which urges policies that conserve the full diversity of life on Earth, across land, ocean and freshwater ecosystems all while working together with Indigenous peoples and local communities to respect and include their needs and traditions. Recognizing the urgency of halting and reversing biodiversity loss, **190 countries at the U.N. Biodiversity Conference in Montreal** late last year adopted a framework to **protect 30% of lands, oceans and waters**. 40 nations, which collectively represent over 30% of global GDP and a quarter of global landmass, have signed on to the 10-Point Plan for financing biodiversity in an effort to confront the **interrelated biodiversity and climate crises**.

2. Between 1970 and 2014, the global wildlife population **shrank by 60 percent**, while global CO2 concentrations climbed above **400 parts per million, and are still climbing**. Yet nature itself presents our best hope of reversing these trends: through **1) forest restoration**, which supports natural carbon sequestration, protects people and wildlife from catastrophic wildfires and nurtures watersheds that sustain people, wildlife and waterways; **2) healthy grasslands and prairies** that prevent erosion, absorb carbon, filter water and support crucial species, such as monarch butterflies. The National Wildlife Federation (NWF) has worked for years to show how conserving and restoring these native ecosystems can safeguard critical drinking-water supplies, remove carbon from the atmosphere and help communities withstand the effects of climate change. Success won't come solely through politics, science, or technology, but will require a **far larger public constituency with a greater emotional and spiritual understanding of the interdependence of all species**. When we help to save the Earth, we also help to save ourselves.

3. According to the North American Bird Conservation Initiative, birds are in crisis: The U.S. and Canada have lost **3 billion breeding birds** since 1970, with **seventy species at a tipping point for going extinct**. Bird populations have declined in nearly all landscapes, victims of habitat loss, invasive species, climate change and disease, according to The Nature Conservancy. As climate change shifts growing seasons, many birds are unable to match their migrations with the availability of food and habitat for nesting. An Audubon report on birds and climate, a comprehensive study that analyzed decades of data, showed that more than half of North America's birds are shifting their ranges to meet their needs. It is unknown whether their needs will be met, but there are things we can do to help birds in our yards and parks: **1) reduce threats** presented by outdoor cats, pesticides and windows; **2) help cut carbon emissions** by making smart decisions about how we live and travel, and by advocating for renewable energy

and regenerative agriculture; **3) restore bird habitat**, which can mean planting trees or creating native grass and wildflowers, and wetland areas for grassland birds.

4. Researchers at Cornell University's ornithology lab tell us that birds are "an early warning of environmental changes that can also affect us," and warn that even in the 50 years since the adoption of The Endangered Species Act, our North American total bird population has **plummeted by one-third**, with grassland birds particularly threatened by **intensive farming, urbanization, shifting climate and habitat loss, and the rapid spread of trees and shrubs once held at bay by periodic fires**. In their new book, "**A Wing and a Prayer: A Race to Save Our Vanishing Birds**," journalists Anders and Beverly Gyllenhaal write that the U.S. has twice as many people and billions fewer birds than in 1953, when ornithologist and educator Roger Tory Peterson wrote his book "Wild America" after a 100-day trip around the U.S. The authors urge us to install bird feeders and nesting boxes, buy bird-friendly coffee, control cats, take children birding and voice your support for conservation efforts at both the local and national levels. They write of the thousands of people across the country volunteering to work on conservation efforts toward restoring grasslands, wetlands and ranch lands. At the same time, researchers at the Smithsonian's Migratory Bird Center are using radio telemetry receivers to track birds across the Great Plains from Canada to Mexico's Chihuahuan desert, while biologists are working with farmers and ranchers to implement practices that lessen the toll of intensive farming - **eliminating hedgerows and buffers, fewer crop types and more pesticides** - in order to foster survival of both livelihoods and native birds. The future of birds - and of ourselves - is up to us to care and to act.