

PROTECTING WILDLIFE FOR A HEALTHY PLANET

Progress Report

This has been a challenging year for wildlife. From record-breaking temperatures to ongoing habitat loss, species in every part of the world are being affected. Your commitment as a member of WWF's Legacy Circle helps us work across diverse ecosystems alongside local partners, communities, and governments to restore habitat, halt poaching and trade, monitor rare species, promote human-wildlife coexistence, and implement innovative technologies to harness a brighter future for wildlife.

As we continue to see devastating declines in biodiversity, this work has never been more urgent. Thank you for being a champion for nature.

Female orangutan near
Bukit Tigapuluh National
Park, Sumatra, Indonesia.
©Neil Ever Osborne/WWF-US





Plains bison (*Bison bison bison*) in Yellowstone National Park, United States. ©Thomas Szajner/WWF-US

PARTNERING WITH NATIVE NATIONS TO RESTORE BISON ON THE NORTHERN GREAT PLAINS

Millions of plains bison once roamed the grasslands of North America. Then years of Western Expansion and US government policies nearly drove the species to extinction. In response to their tragic decline, conservationists and Indigenous peoples have been working for more than a century to bring the plains bison back from the brink. Since 2014, WWF has partnered with Native Nations throughout the Northern Great Plains in support of their efforts to conserve and restore grassland ecosystems and bring bison back to their traditional homelands.

Most recently, with the goal of increasing understanding of current Tribal bison restoration work, WWF organized a pivotal Returning Buffalo with Native Nations Roundtable. Bringing together Tribal bison restoration leaders and influential federal agency members, the roundtable enabled deeply productive discussions—most importantly, with Native Nation leaders driving the conversation. The breakthrough approach allowed for deeper listening and stronger understanding of ways that government agencies can better support Tribal approaches to restoration. This significant event, along with ongoing progress on Native-led bison restoration projects, has supercharged momentum for bison and grassland restoration efforts.



Jaguar (*Panthera onca*), Pantanal, Brazil. ©naturepl.com/Uri Golman/WWF

RECOVERING BIG CATS IN THE WILD

Big cats like lions, tigers, cheetahs, and jaguars contribute to healthy ecosystems and provide benefits to people and the economy, yet these iconic species have suffered dramatic population declines over the last century. To help big cats make a comeback, WWF works with partners and communities to restore habitat, stem poaching and trade, monitor big cats and their prey, and improve human-wildlife coexistence.

India recently announced that its tiger population has exceeded 3,100 tigers, up from about 1,400 in 2010. Meanwhile, Bhutan's tiger numbers have grown 27% since the country's first survey in 2015.

In the Americas, WWF partners with communities on the ground, local and national groups, and government agencies to safeguard key jaguar landscapes. In 2022, WWF successfully advocated for greater transboundary collaboration to secure jaguar populations and combat illegal trade. With populations distributed across 18 countries, this level of cooperation is critical to the future of jaguars.



Elephants (*Loxodonta africana*) in Torra Conservancy, Namibia. ©Marcus Westberg/WWF-US

FACILITATING TRANSBOUNDARY COOPERATION

In the fall of 2022, aircraft surveyed over 120,000 square miles of southern Africa's Kavango Zambezi Transfrontier Conservation Area, known as KAZA, to estimate the number and distribution of Africa's largest savanna elephant population. All five partner states that make up this area—Angola, Botswana, Namibia, Zambia, and Zimbabwe—along with WWF, multiple organizations, governments, and other partners, worked collaboratively to implement a standardized survey of the entire contiguous elephant population in a single coordinated exercise. This is especially important in this region, where elephants and other wildlife regularly move across country borders.

The survey findings, released in August 2023, found an overall stable and slightly larger population of 227,900 elephants in the region, with variation between and within countries. While the number of elephants in Zambia has decreased compared to previous surveys, populations in Angola, Botswana, Namibia, and Zimbabwe have all increased. These results will be critical for future conservation efforts in the region and will serve as an important baseline for wildlife monitoring.



Asian rhino (*Rhinoceros unicornis*) in Kaziranga National Park, India. ©Richard Barrett/WWF-UK

RESEARCHING DISEASE IN RHINOS IN ASSAM, INDIA

The health of the rhino population in Assam, India has enormous implications for the entire species. WWF and our partners made strides in disease research by analyzing hormone and parasite loads in dung. Over the past two years, our team analyzed hormones in around 100 dung samples. Our studies in Orang and Kaziranga National Parks found that the prevalence of parasites was declining overall.

In addition, WWF, India's Ministry of Environment, Forest and Climate Change, and other partners continue to use RhODIS, the rhino DNA profiling database, to catalog individual rhino DNA samples. WWF has collected more than 1,000 dung samples, added 350 rhinos to the database, and used unique DNA profiles from across India to better understand the population's genetic health and evolution. Importantly, the team also assembled 100 wildlife crime evidence collection kits and made them available for use in rhino poaching cases.



Polar bears (*Ursus maritimus*) in Beaufort Sea, off the Arctic coast of Alaska.
©naturepl.com/Steven Kazlowski/WWF

USING TECHNOLOGY TO LOCATE ELUSIVE WILDLIFE

Scientists can collect the genetic material of plants and animals, from bacteria to large vertebrates, called environmental DNA (or eDNA). This makes it possible to retrieve and sequence the DNA in cost-effective ways using both public and proprietary databases.

Since 2013, WWF has partnered with leading scientific institutions with expertise in eDNA to work on applications that improve biodiversity monitoring. Better eDNA data management has the potential to revolutionize inventory systems and fill knowledge gaps so that more conservation scientists can apply the data to safeguard the natural world.

WWF has demonstrated the effective use of eDNA in various arenas, including cataloguing aquatic biodiversity in the Mekong River and northern Thailand; monitoring tiger and their prey in Bhutan, Myanmar, and Laos; learning about polar bears in the Arctic; and locating the presence of extremely rare species such as the Sumatran rhino.



Sniffer dog, Murray, in Chitwan National Park, Nepal. ©Akash Shrestha/WWF-Nepal

SCREENING CARGO WITH SNIFFER DOGS

Ports and shipping routes are key links in the wildlife trafficking supply chain, but detecting illegal wildlife products among millions of sea containers is like finding a needle in a haystack. Port authorities rely on specially trained “sniffer” dogs to help screen cargo for illegal wildlife products, but the process of unpacking shipping containers for dogs to sniff is time and labor intensive.

WWF and partners are refining a promising air sampling technology that would make sniffer dog detection a more effective and expedient option. This low-cost technology is made from locally available materials. Using a vacuum device, air is suctioned out of a shipping container and passed through a filter which traps the scent particles. These filters are then presented to the dogs who can detect whether illegal wildlife is present, all without ever opening the container. During initial testing of the prototype device, the dogs were over 90% accurate in finding elephant ivory and shark fin. Ongoing field tests of the technology by WWF and partners are currently underway.

THANK YOU

We are enormously grateful for your commitment to safeguarding wildlife, which is more important than ever. With your support, we are using cutting-edge technology and working on the ground with local partners to help biodiversity thrive. Thank you for helping us protect and restore wildlife and their habitats around the world.



Emperor penguins (*Aptenodytes forsteri*),
Dawson-Lambton Glacier, Antarctica.
©Fritz Pölking/WWF

