

CONSERVATION CROSSROADS: EXTINCTION OR RECOVERY?

Reaffirming our conservation values and upholding the Endangered Species Act





Defenders of Wildlife is a national, nonprofit membership organization dedicated to the protection of all native wild animals and plants in their natural communities.

Jamie Rappaport Clark, President and CEO Donald Barry, Executive Vice President

> EDITORIAL TEAM Writer: Kathy Westra Project Manager: William Lutz Editor: Kate Davies Designer: Peter Corcoran

© 2013 Defenders of Wildlife 1130 17th Street, N.W. Washington, D.C. 20036-4604 202.682.9400 www.defenders.org



"Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed. It is a many-faceted treasure, of value to scholars, scientists, and nature lovers alike, and it forms a vital part of the heritage we all share as Americans...a heritage which we hold in trust to countless future generations of our fellow citizens. Their lives will be richer, and America will be more beautiful in the years ahead, thanks to the measure that I have the pleasure of signing into law today."

> PRESIDENT RICHARD M. NIXON Endangered Species Act Signing Statement December 28, 1973

CONSERVATION CROSSROADS, 1973 AND NOW

When President Richard M. Nixon signed the Endangered Species Act (ESA) on December 28, 1973, America was at a conservation crossroads facing a stark choice: Would we as a nation accept a future of vanishing species? Or would we have the wisdom, courage and vision to protect our nation's natural heritage for future generations?

Thankfully, Congress, President Nixon and the American people chose the path of protection, passing the ESA and paving the way for some of our nation's greatest conservation success stories. Today this landmark legislation faces new challenges that require the same measure of courage and vision shown by Congress and the president in 1973. After 40 years of ESA successes, America is once again at a conservation crossroads.









SETTING THE STAGE

The stage for the conservation battles of the early 1970s was set in the boom years that followed World War II. Unregulated development led to economic prosperity, but the question quickly arose: What was the effect of this growth on the natural world?

The first warnings of possible trouble came with the publication of Rachel Carson's *Silent Spring* in 1962. Carson raised the specter of a pesticide-contaminated world with the potential to kill birds, plants, animals and humans alike. Her combination of compelling scientific evidence and riveting prose helped politicians and the public understand that all species are connected in a fragile ecological web, and that harm to one creature represented harm to us all.

By 1970 the nation found itself faced with large-scale environmental crises. Oily debris in Ohio's Cuyahoga River caught fire, highlighting a growing problem with pollution and toxins in our waterways. Brown blankets of smog from automobile exhaust and factory smokestacks choked many American cities, pointing to problems in the skies as well. And large numbers of species-including the majestic symbol of America, the bald eagle-were headed down the road to extinction, the victims of unregulated industry and pesticides like DDT.

These crises and the public alarm and outcry they produced led Congress to pass many of our nation's landmark conservation laws like the Clean Air Act, the Clean Water Act and the Endangered Species Act. All passed by wide bipartisan majorities, a bold statement by policy makers that America's natural resources were too precious to squander.

AFFIRMING OUR CONSERVATION VALUES

The depth and breadth of thought and bipartisanship our leaders engaged in as they formulated the ESA are stunning by today's standards. Some examples of their forward-thinking conclusions, and excerpts from the 1973 House Committee on Merchant Marine and Fisheries report on the background and need for the ESA¹ that reflect them, follow.

In framing the ESA, politicians on both sides of the aisle acknowledged that "economic growth and development untempered by adequate concern and conservation" had led to an extinction crisis, putting plants and animals at risk. They also acknowledged that with humanity's intelligence and power comes great responsibility.

"Man's presence on Earth is relatively recent, and his effective domination over the world's life support systems has taken place within a few short generations. Our ability to destroy, or almost destroy, all intelligent life on the planet became apparent only in this generation. A certain humility, and a sense of urgency, seem indicated." And they were indeed prophetic. Today, Harvard conservation biologist E.O. Wilson, one of the world's preeminent scholars on biodiversity, estimates half of all species worldwide are likely to go extinct in the next century given current rates of habitat destruction by humans.

"From all the evidence available to us, it appears that the pace of disappearance of species is accelerating. As we homogenize the habitats in which these plants and animals evolved and as we increase the pressure for products that they are in a position to supply (usually unwillingly) we threaten their—and our own—genetic heritage."

Our leaders at the time talked of values like wonder and reverence for nature, of obligation and responsibility to future generations and of caution and prudence in our treatment of our natural resources. And in passing the ESA, Congress acknowledged not only that America's plants and animals were part of our nation's common treasury, but that, as a nation, we recognized the dreadfulness and finality of extinction and would not tolerate it.

"If the blue whale, the largest animal in the history of this world, were to disappear, it would not be possible to replace it—it would simply be gone. Irretrievably. Forever."

Although they recognized the intrinsic value of each species as a link in the ecological chain, the authors of the ESA also were able to envision and articulate the many tangible human benefits of conserving species for the future. Over the years, their predictions have proved true.

"Who knows, or can say, what potential cures for cancer or other scourges, present or future, may lie locked up in the structures of plants which may yet be undiscovered, much less analyzed?"

In the four decades since the passage of the ESA, new medicines derived from protected plants have advanced human health. Habitat

¹ U.S. Congress. House. Committee on Merchant Marine and Fisheries. Endangered and Threatened Species Act of 1973. 93d Cong., 1st sess. H. Rep. 4.



protected for listed species has yielded healthier surrounding environments, helping to reduce erosion, restore wetlands, protect pollinators for food crops, protect coastlines from storm surges and enhance water quality. And protected lands and species provide immense economic benefits as Americans continue to embrace their natural heritage through hiking, camping, fishing, hunting, wildlife watching and other outdoor recreation activities.

The authors of the ESA also understood that species protection needed to coexist with the growth of human society. To address this, they created a flexible law that included incentives for local governments and private landowners to comply with its requirements. In the 40 years since its passage, the ESA has been true to its authors' vision, implemented as a flexible, common-sense partnership among all interested parties, including federal, state, tribal and local governments and private landowners.





Protecting Wildlife and Habitat Brings Additional Benefits

In addition to saving species and critical habitats, the protections afforded by the ESA benefit our health, environment and economy. In a 2011 report prepared for the National Fish and Wildlife Foundation, the value of benefits provided by protected natural habitats in the contiguous United States was estimated at about \$1.6 trillion per year. Here are some specific examples:

MEDICINE

Many modern medicines contain active ingredients derived from the natural world. The endangered Houston toad is a prime example. It secretes serotonin-an essential chemical in our brains-and alkaloids used to treat heart and neurological disease. The alkaloids are thought to have analgesic properties more powerful than morphine.

PEST CONTROL

The endangered Indiana bat can eat half to all its body weight in insects per night, providing free pest control for people and our food supply.

According to a study published in Science magazine, insect-eating bats provide pest-control services worth at least \$3.7 billion per year to the agricultural industry.

FLOOD CONTROL

Protected habitat around inland marshes, river deltas, barrier islands and flood plains provide a vital buffer between human communities and high water. By soaking up water and creating a physical barrier, these natural land formations limit property damage generated by severe storms and flooding. For example, marshlands near the Charles River in Boston offer flood control worth \$72,000 per acre.

OUTDOOR RECREATION

Americans love nature. Economic benefits from outdoor recreation linked to habitat conservation have also been significant. Wildlife-related recreation alone is a \$145 billion a year industry, and wolf watching in Yellowstone has brought \$35 million in direct annual revenue to the region.

NEW THREATS, NEW CROSSROADS

Like the authors of the ESA in 1973, today's leaders are at a conservation crossroads facing another stark choice between extinction and recovery. Despite the tremendous successes of the past four decades, a new extinction crisis looms. Ever-increasing energy demands and the worsening impacts of climate change are taking a toll on America's most vulnerable wildlife. And habitat is disappearing at a staggering rate. In 2006, the U.S. Forest Service estimated that 6,000 acres of open space are lost each day, four acres each minute.

We simply must stop the further decline of imperiled species before they need the protections of the ESA and rededicate ourselves to the recovery of species already listed before they slip closer to the abyss of extinction. The ESA has shown that it can produce remarkable recovery successes (see "What We Have Saved," page 8), but such efforts need to be accelerated for many species so that they too can be assured of recovery.

Today, too many politicians seem to have forgotten the values Congress embraced 40 years ago when conservation laws such as the ESA passed overwhelmingly. Now, a number of lawmakers are actually intent on weakening or repealing these laws altogether. Indeed, wildlife opponents often use national economic challenges as an excuse to roll back essential environmental protections under the guise of creating more jobs. And even though ESA expenditures are a minuscule portion of the federal budget, some politicians have attempted to slash funding for conservation. Others are playing special-interest politics by trying to dismantle protections one species at a time.

Recent congressional action to delist the Northern Rockies population of the gray wolf is a case in point. This was the first time Congress intervened in the listing process, putting politics above science. As a result, extreme state management plans could erase the ecosystem and economic benefits wolf recovery has brought to the region.



A CALL TO ACTION

After four decades of progress in saving endangered species, we must once again commit ourselves to action to address today's challenges and improve the conservation status of hundreds of species whose recovery prospects are still uncertain. We must act quickly if we are to avert a new extinction crisis in the future. Unlocking the vast—but still unrealized—conservation potential of the ESA will once again require our leaders to reaffirm the conservation values that define our nation and underpin the ESA.

Protecting species for their intrinsic value and their value to future generations of Americans is as important now as it was four decades ago. Wildlife still holds the key to solutions for challenges we have not yet begun to imagine. As our nation faces a future defined by rapid change and escalating environmental pressures, we must:

- Uphold the conservation values and sense of responsibility to future generations that shaped the ESA.
- Stand firm in the face of those who would undermine or repeal the ESA.
- Provide the funding needed to fully implement the ESA and assure protection for all species that require it.
- Speed recovery efforts for hundreds of listed species.

Long before Congress passed the ESA, Republican president and conservationist Theodore Roosevelt wrote in an 1899 letter to ornithologist Frank M. Chapman, "When I hear of the destruction of a species, I feel just as if all the works of some great writer had perished." Thanks to the ESA, more than 2,000 of the greatest works of nature's vast library have been preserved. It is up to all of us to recognize the value of saving wildlife and ensure the safety of the rest.

What We Have Saved

Under the ESA, 40 years of habitat conservation and recovery plans have yielded significant success. Of more than 2,000 species listed-plants, invertebrates, fish, reptiles, amphibians, birds and mammals, most of which were considered in imminent danger of extinction-less than 1 percent have been formally delisted due to extinction. The species highlighted here are among those that have come back from the brink thanks to the ESA:



BALD EAGLE Our national symbol nearly disappeared throughout most of our country. Today, 9,000 bald eagle pairs can be found across the United States.



FLORIDA MANATEE

This well-loved sea mammal has been listed as endangered since the ESA became law. Thanks to the creation of 17 manatee refuge and sanctuary areas and other conservation measures under the ESA, the manatee is holding its own and has been slowly increasing its numbers.





PEREGRINE FALCON

By 1975, the use of pesticides like DDT had reduced the population of the world's fastest bird to just 324 nesting pairs. Today, there are between 2,000 and 3,000 breeding pairs in North America, and the falcon was removed from the endangered species list in 1999.



APACHE TROUT

When it was placed on the endangered species list, the Apache trout was near extinction. Thanks to riverbank habitat restoration and hatchery breeding programs under the ESA, several million trout have been released into the wild, and there are now nearly 30 self-sustaining populations of the fish.

SOUTHERN SEA OTTER This iconic resident of the California coast was hunted almost to extinction for its thick fur coat. Since being added to the endangered species list in 1977, the population has slowly increased to about 2,800 otters today.



FLORIDA PANTHER

The ESA prompted the use of emergency conservation measures in 1995 to restore genetic variability to the dangerously diminished panther population. Since then, the population of Florida panthers has increased from a low of fewer than 30 wild panthers to between 100 and 160 today.

DEFENDERS OF WILDLIFE'S CONSERVATION CROSSROADS: EXTINCTION OR RECOVERY? CAMPAIGN

As we celebrate the ESA's successes we must also affirm our commitment to wildlife conservation progress. With this in mind, Defenders of Wildlife has launched the "Conservation Crossroads: Extinction or Recovery?" campaign. Our goal is to accelerate the recovery of imperiled species and help concerned citizens get involved in educating policymakers about actions that must be taken to renew the nation's commitment to saving wildlife. Watch the campaign video and find out more on our website:

www.defenders.org/crossroads



Defenders of Wildlife 1130 17th Street, N.W. Washington, D.C. 20036-4604 202.682.9400 www.defenders.org