In February, the Center released findings from the first-ever comprehensive assessment of the success of the federal Endangered Species Act (ESA). The study shows that the majority of listed species have remained stable or improved since gaining protection under the Act, while not one species has gone extinct under its protection.

With one anti-ESA bill already passed by the House of Representatives and another currently in the Senate, the success of the Endangered Species Act has become a hot-button topic with politicians and environmental groups alike.

Opponents of endangered species protections—led by Rep. Richard Pombo, R-Calif., author of abhorrent anti-endangered species bill H.R. 3824—like to point out that of the 1,350 plants and animals that have been listed as threatened or endangered under the Endangered Species Act, only 14 have recovered to the point that they could be removed from the list. Pombo and his allies have relied heavily on these numbers to spin their claim that “the ESA has a 1 percent success, 99 percent failure rate” and to justify gutting the Act.

The Center’s report, titled “Measuring the Success of the Endangered Species Act,” counters this lie by measuring whether population sizes have increased or decreased for species since listing under the Act, and whether progress toward recovery is consistent with timelines established by federal recovery plans for those species.

In the first stage of the study released Feb. 28, the Center compiled population data for 53 species protected under the Endangered Species Act in eight northeastern states: New York, New Jersey, Connecticut, Massachusetts, Rhode Island, New Hampshire, Vermont and Maine. Of the 41 species for which there are available data, the study found that populations of 93 percent of those species increased or remained stable.

Twenty-seven of the 41 species (66 percent) had increased population numbers since listing under the Act, while populations of 11 species (27 percent) had remained stable since being listed. While four species had become extinct or extirpated from the United States prior to their protection under the Act, no species had become extinct since being listed.

On average, species had been listed as threatened or endangered for 24 years. By comparison, federal
Scientists recently reported that a staggering 74 out of 110 species of the Monteverde harlequin frog group, which includes some of the most beautiful amphibian species on Earth, have been driven extinct by global warming.

Add to this loss the melting of polar bear habitat in the Arctic and increased levels of dissolved carbon dioxides in the ocean habitat of rare corals, and you'll see what nature has been telling us for some time now: extinction from global warming is not a future worry. Far from being just a foreboding buzz phrase, global warming is already responsible for one of the largest vertebrate extinction events of the past 100 years.

In the case of the harlequin frogs, the cause of extinction was the chytrid fungus—a disease that kills frogs by growing on their skin, attacking their epidermis and teeth, and releasing a toxin. For these frogs, global warming loaded the gun that killed them, and the chytrid fungus pulled the trigger.

Hotter days are here
Thus far, the planet’s average air temperature has warmed by “only” about 1 degree Fahrenheit (0.6 degrees Celsius), yet this amount of warming has already had a profound impact on Earth’s biodiversity. And even if we were to eliminate manmade greenhouse gas pollution tomorrow, the amount of excess heat already present in the climate system guarantees us another 1 degree Fahrenheit of warming.

In its Third Assessment Report of global climate change released in 2001, one of the most extensively peer-reviewed scientific documents ever produced, the Intergovernmental Panel on Climate Change (IPCC) predicted an additional 2.5 to 10.4 degree Fahrenheit warming (1.4 to 5.8 degree Celsius) in this century. These figures are likely to be revised upward in the Fourth Assessment Report due out next year.

In recent years, science has dramatically closed the uncertainty gap regarding the magnitude and timing of climate change; not only is the phenomenon itself indisputable, but its potentially devastating effects are becoming all too clear.

Species at risk
Global warming is clearly one of the leading threats to biodiversity, and the number of documented impacts is growing explosively.

Some of the first phenomena observed are profound changes in the life cycles and behaviors of organisms. Plants are blooming sooner. Birds are laying chicks earlier in the spring. While these changes may not be detrimental to all species, they may be devastating to crucial timing and interactions between species.

A prime example is Edith’s checkerspot butterfly: although the host plant on which caterpillar eggs develop now blooms earlier in the spring, the caterpillars hatch at the same time they always have. As a result, caterpillars now hatch on plants that have already dried up. Lacking young, fresh plants, the tiny caterpillars starve to death.

In response to global warming-induced climate change, the range of the Edith’s checkerspot butterfly has moved north and up in elevation—not because butterfly populations have actually moved, but because many populations have disappeared. More populations have been lost in the southern than northern portion of the range, resulting in a net shift of the species northward. The Quino checkerspot subspecies in southern and northern Baja California (already listed as endangered due to habitat destruction and other threats) has disappeared from nearly 80 percent of otherwise suitable habitat due to global warming.

An additional problem is that many species must move through a landscape severely fragmented by human activity. So while theoretically some species can move in response to climate change...
change, many that once would have been able to do so now will be prevented by urban development and other impacts.

And the least mobile species will be among the first to go, as demonstrated by the plight of the American pika, a small vegetarian relative of the rabbit. Pikas have evolved to exploit an alpine niche on cold, windswept, rocky mountaintops where they receive protection from heat and predators. Pikas are excellent at surviving cold but incapable of coping with high temperatures. If unable to escape into cool rock crevices, pikas can die within hours from exposure to temperatures as low as 55 degrees Fahrenheit.

American pika populations all over the western U.S. are disappearing, and the average elevation of surviving populations is now above 8,700 feet, up from a pre-historic average of about 5,700 feet. As temperatures warm and the treeline advances northward, the pikas have nowhere to go.

Other alpine species face the same problem, including alpine plants, which are among the least mobile of all species.

Because these are just a few of the impacts from a 1 degree Fahrenheit increase in average global air temperature, changes from 2.5 to 10.4 degrees Fahrenheit or more of projected warming are profoundly disturbing.

A leading study published in a 2004 issue of Nature examines extinction risk from rising temperatures for over 1,100 species. Researchers found that between 18 and 35 percent of these plants and animals will be committed to extinction by the year 2050, depending on how much and how quickly temperatures rise.

The message is clear: if we are to keep thousands of species from the perilous brink of extinction, we must reduce greenhouse gas pollution immediately.

**Tackling the effects and the cause**

The Center’s Climate, Air, and Energy program is working to raise awareness of the dangerous impacts of global warming, protect species most at risk, and advocate for reduced greenhouse gas emissions.

To date, ongoing work includes a case under the Energy Policy Act to compel the federal government to comply with less polluting, alternative-fuel vehicle purchasing requirements. In addition to working for increased fuel economy standards for pickup trucks and sport utility vehicles, we are opposing new oil and gas development in the Arctic and in the lower 48 states. We also petitioned in February to have Glacier National Park added to the list of World Heritage Sites in Danger due to climate change.

We will continue to closely monitor our petitions filed to extend Endangered Species Act protections to the polar bear (see sidebar), staghorn and elkhorn corals in the Caribbean, and the Kittlitz’s murrelet, an Alaskan seabird—all species threatened by global warming.

We are also working on a plan to reduce the Center’s own organizational carbon footprint to zero through all possible conservation measures, use of solar power, and carbon offset projects that benefit biodiversity.

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**Polar bear on its way to protection**

The polar bear, the Arctic’s top predator and an icon of the north, is adapted to life in the extreme cold and perhaps more directly vulnerable to global warming than any other species. In response to a 2005 scientific petition and legal action from the Center, the U.S. Fish and Wildlife Service has begun the process to add the polar bear to the federal list of endangered species. The case for listing polar bears relies on international scientific consensus on the causes, magnitude and timing of climate change. Bringing the best available science to bear on that case, as the Endangered Species Act requires, should create important precedent.

We will not only highlight the severity of the global warming crisis, but also call upon the government to act quickly to reduce greenhouse gas emissions in order to prevent the polar bear’s extinction.
Report documents pesticide risks

The Center released a report in March detailing the risks of toxic pesticides to endangered species in the San Francisco Bay Area. Titled *Poisoning Our Imperiled Wildlife: San Francisco Bay Area Endangered Species at Risk from Pesticides*, the report outlines harmful effects of pesticides on 30 of the 51 Bay Area species listed under the Endangered Species Act. Such effects on pesticide impacts to endangered species suggests the need to immediately ban the most toxic pesticides and to develop and promote ecologically-based pest management in order to phase out all other harmful pesticides.

Additionally, the Center recently filed a motion with the U.S. District Court in California to restrict use of 66 pesticides known or suspected to pose risks to the threatened California red-legged frog, until the EPA completes formal consultations to determine the impacts of these chemicals on the frog. The motion asks that use of the pesticides be restricted within and around the frog’s core recovery areas and that consumer warnings be posted wherever the pesticides are sold.

The Center’s motion follows a September 2005 court ruling that the EPA had violated its duty to fully assess risks to the frog from the pesticides before registering them.

Permits challenged on endangered Santa Clara River

The Santa Clara River is one of the most biologically diverse and important river systems left in southern California. It has no dams along its 85-mile length, which flows from the desert slopes of the San Gabriel Mountains of Los Angeles County through the pastoral landscape of Ventura County to the ocean at Oxnard. In 2005, American Rivers recognized the Santa Clara as one of the 10 most endangered rivers in the United States due to explosive urbanization.

The Center, the Wishtoyo Foundation, and Friends of the Santa Clara River took action in February to save the river, filing a lawsuit against the Army Corps of Engineers for failing to evaluate the cumulative impact of projects it permits on the river.

In the last four years, the Corps has allowed more than 100 projects to fill, pave or develop parts of the river and its tributaries, without any comprehensive analysis of the effects to biological, cultural and water resources. More projects are in the pipeline, including the new city of Newhall Ranch, with over 23,000 houses proposed in and along the banks of the river.

The river is home to dozens of rare species, from the southern steelhead trout, unarmored threespine stickleback, arroyo toad and least Bell’s vireo to the thought-to-be-extinct San Fernando Valley spineflower, which in 2002 was rediscovered covering hills adjacent to the river. These species will be pushed further toward extinction if current levels of destruction continue.

The Santa Clara River Valley also has long been used by ancestors of the Tataviam, Chumash and Serrano peoples who hold the river sacred, and its degradation harms their tribal cultures and revitalization efforts. Furthermore, degradation of the river imperils water quality for local communities, potentially increasing reliance on expensive imported water.

The Center and our partners seek to force the Corps to comprehensively evaluate these issues before permitting further development.

Center seeks Tejon preserve for condor

This spring, the Center moved to protect the endangered California condor by asking that the Tejon Ranch Company set aside 245,000 acres of Tejon Ranch land as a wilderness preserve.

Spanning over 270,000 acres from the “Grapevine” stretch of Interstate 5 north of Los Angeles up to Fort Tejon, the ranch is one of California’s most remarkable unprotected natural landscapes. Unusually diverse, the area boasts oak woodlands, grasslands, pine woodlands and desert. The ranch’s array of wildlife includes as many as 20 plants and animals protected under the Endangered Species Act, among them the highly endangered California condor.

Tejon Ranch has long been core condor habitat and was one of the last places wild condors inhabited before all remaining birds were captured in the 1980s for an ambitious captive-breeding program. Thanks to that program, there are now over 125 reintroduced condors living in the wild, with 57 in California. Today, reintroduced condors use the remote open spaces of Tejon Ranch as essential foraging and roosting areas.

Much of Tejon Ranch has been designated by the U.S. Fish and Wildlife
Service as critical habitat for the condor, since it contains important condor flight pathways, significant feeding habitat close to the Sespe-Piru condor nesting area, and habitat for the Tejon deer herd. Privately owned by the Tejon Ranch Company, the ranch is already slated for three massive development projects that would do irrevocable damage to the condor’s habitat as well as the area’s other ecosystems and wildlife. The company has floated a sham conservation proposal to sell portions of the ranch at inflated prices to the state as a conservation area, while seeking approval to develop other biologically critical areas. However, the proposal excludes the most important wildlife habitat and offers up for sale lands with little or no development potential. To add insult to injury, these publicly purchased lands would have limited and difficult public access. The company is also requesting a federal permit that would allow harm or even killing of condors as a result of the developments.

By contrast, the Center’s alternative proposal to preserve 245,000 acres of the ranch would ensure protection for key condor habitat and create a State or National Park for the public to enjoy. The Center is also working to block any permits that would allow developers to harm or kill condors or destroy their critical habitat.

Administration aims to remove protection from Mexican bobcat

In November 2005, the U.S. Fish and Wildlife Service (USFWS) proposed removing the Mexican bobcat from the federal list of threatened species—the second time the Bush administration has sought to remove protection of the southernmost subspecies of an animal mercilessly pursued for its beautiful spotted pelt.

The Center responded this year, as we did in 2003, with a substantive rebuttal of the proposal to delist the bobcat.

USFWS and the National Trappers Association, who petitioned for the delisting, claim the Mexican bobcat is not a true subspecies and should suffer the same lack of protection as U.S. bobcats, which are severely exploited to the point of localized extinction in some areas. But they offered no proof to support that claim.

The Mexican bobcat was identified as a subspecies in 1903. Its pelage differs from those of northern bobcats and it occupies different habitat, including vast regions of Sinaloan thornscrub and Sinaloan deciduous forest. It is also unique in that it shares its range with ocelots and jaguarundis. This geographic sympathy likely influences the behavior of all three similarly sized carnivores.

Attempting to gerrymander the range and definitions of subspecies and populations is a tried and true tactic of the Bush administration and its allies. In 2003, the administration tried to renege on its 1978 pledge to conserve endangered wolf subspecies by essentially defining the Mexican gray wolf out of existence. The Center was part of a successful lawsuit that overturned this rule in January 2005.

Petition filed to protect Mojave lizard

The Center filed a petition in March to protect the Mojave fringe-toed lizard under the Endangered Species Act. Southern California’s Amargosa River population of the Mojave fringe-toed lizard is rapidly declining due to harm from increasing off-road vehicle (ORV) traffic, and toxins and residual pesticides in the environment.

The Mojave fringe-toed lizard has smooth sand-colored skin with black specks, allowing the lizard to conceal itself in its desert habitat. A small fringe on the sides of its toes aids in traction and prevents the lizard from sinking into the sand.

The lizard was once abundant in California’s Dumont Dunes, Ibex Dunes and Coyote Holes, in addition to some regions of Arizona. But since 1979, the Dumont Dunes have seen a 230 percent increase in ORV traffic, which has in turn fueled illegal traffic to nearby Ibex Dunes and Coyote Holes. Well-camouflaged just centimeters below the surface sand, fringe-toed lizards are crushed to death by passing vehicles.

ORVs also destroy the lizard’s fragile desert habitat by damaging above-ground vegetation as well as shallow root systems. Dunes plants not only provide the lizard protection, but also shelter its food sources of insects, seeds and flowers.

The Mojave fringe-toed lizard could not be located at two out of three potential historical sites in Death Valley National Park, which means that Ibex Dunes may represent the only remaining population within the park. Without federal protection, including better management of ORVs and designation of critical habitat for the species, the Mojave fringe-toed lizard faces extinction along the Amargosa River—a tragedy the Center is working to halt.

Two forest victories halt logging of old-growth

In January, the Center celebrated a victory for old-growth forests in the Pacific Northwest when a court reversed a Bush administration decision to eliminate protections for old-growth forests and wildlife.

Under the Survey and Manage Program, the Northwest Forest Plan...
requires federal agencies to survey old-growth areas for rare plants and wildlife before logging can occur. If imperiled plants and animals are present, logging companies must modify their plans to reduce the risk of extinction.

The Bush administration attempted to eliminate these old-growth surveys after the logging industry filed grievances in 2001. But before the industry’s case even reached the courts, the administration agreed to its demands, and conservationists were compelled to file their own suit to reinstate the old-growth protections.

The recent court ruling found in favor of conservationists, reinstated the Survey and Manage requirement, and halted more than 140 Northwest timber sales—about half of which would have harvested old-growth.

In the Southwest, the Forest Service announced in February it had canceled plans to log old-growth ponderosa forests on the North Rim of the Grand Canyon.

The Center and the Sierra Club had joined to oppose the “East Rim” timber sale in federal court. Negotiations with the Forest Service ended favorably when the agency decided to withdraw the project completely.

This marks the second time in less than a year that the Kaibab National Forest has reversed a decision to log old-growth forests on the North Rim. The Forest Service withdrew the “Jacob-Ryan” timber sale last summer after widespread opposition and an administrative challenge filed by the Center.

Both Grand Canyon projects would have logged important habitat for the northern goshawk, a predatory bird that once lived in great numbers on the North Rim, but whose population had diminished to just 35 pairs in the Kaibab National Forest in 2004.

Center seeks World Heritage protection for Waterton-Glacier

The Center and coalition partners petitioned the United Nations World Heritage Committee in February to list Waterton-Glacier International Peace Park as a World Heritage site “in danger.” Glacier National Park, along with its sister park across the border in Canada, has experienced major glacier melting and environmental degradation due to global warming.

Waterton-Glacier International Peace Park was designated as a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site in 1995. The World Heritage Convention is designed to protect the planet’s most special places.

In 1850, Montana’s Glacier National Park had 150 of the glaciers for which it was named; today, only 27 glaciers remain. Glaciers have succumbed to higher temperatures, documented by the U.S. Geological Survey at about a 3 degree Fahrenheit increase over the last century.

The petition, prepared by the International Environmental Law Project at Lewis & Clark Law School in Portland, Ore., was filed one year after the Kyoto Protocol—the international agreement to reduce greenhouse gas emissions—went into effect without the participation of the United States.

If Waterton-Glacier is designated as “in danger,” the United States will be required to develop a plan for its protection. That plan should include reducing U.S. greenhouse gas pollution, which accounts for more than 20 percent of total worldwide emissions. Immediate greenhouse gas pollution reductions could be achieved through higher vehicle mileage standards, increased energy efficiency in homes and workplaces, and increased use of renewable energy sources—all of which can also benefit the economy and improve our quality of life.

Faulty clean air standards challenged in court

In February, the Center led a coalition in filing suit against the Environmental Protection Agency (EPA) for failing to evaluate and update its sulfur dioxide (SO2) standard.

According to the Clean Air Act, every five years the EPA must review standards for SO2, along with several other key indicator pollutants, and implement any changes necessary to maintain proper human and environmental health.

In a 1980 study, the EPA found that SO2 damaged sensitive vegetation at concentration levels much lower than
On the Ground in Arizona
Trips bring together stewards of different stripes
By Greta Anderson, Range Restoration Coordinator

For more than 15 years, the Center has worked to protect endangered species and wild lands in Arizona. This year, we have launched a special series of fieldtrips designed to reach out to the communities directly involved with conservation and recovery of Arizona’s endangered wildlife and habitat.

The trips are part of the Center’s Arizona Endangered Species Assessment Project, which will document the status of all Arizona plants and animals protected under the federal Endangered Species Act. We wanted to know which species were recovering, which were still threatened with extinction, and what needed to be done to improve their prospects for survival. The project will culminate in a report that will be available in print and on the Web later this year.

The fieldtrips aim to translate what we’ve learned about Arizona’s endangered species into site-specific discussions about on-the-ground actions needed to move them toward recovery. By bringing together expert biologists, land managers, state and county officials, media, Center members and other concerned citizens, we are working to facilitate active conservation solutions.

In November 2005, we led a trip to southeastern Arizona’s San Pedro River—a treasure-trove of biological diversity, but an ecosystem at risk due to groundwater pumping in adjacent communities. The trip highlighted immediate actions that will protect the Huachuca water umbel, southwestern willow flycatcher, and other imperiled species that depend on this riparian corridor.

In January, we organized a trip to southern Arizona’s Buenos Aires National Wildlife Refuge to see firsthand the efforts already underway to restore habitat for the masked bobwhite quail. The Refuge also monitors the Pima pineapple cactus, a species endangered by development in Pima County. We were joined by area residents whom we hope will continue to take interest in refuge management and even volunteer to monitor imperiled species.

Participants on our March trip to Sonoran Desert National Monument got their hands dirty, pitching in on a road closure and restoration project before taking a closer look at the impact of land uses, such as livestock grazing, on the Monument’s imperiled wildlife, including the desert tortoise and bighorn sheep.

Upcoming trips include recovery areas for the Mexican gray wolf, and a follow-up visit to Fossil Creek, site of the 2005 dam decommissioning, to see how the riparian areas are recovering and to witness restoration of aquatic habitat for five rare native fish.

To learn more about the trips or to participate in one in your area, please contact ganderson@biologicaldiversity.org. So far, only Arizona trips are planned, but it is possible that in the future we will be able to expand to other states.

The Center thanks the Nina Mason Pulliam Charitable Trust for its generous support of this project.
ESA Success continued from front page

recovery plans estimated an average of 42 years necessary for these plants and animals to recover. That is, most of the species had not yet been listed as long as they were expected to need for recovery.

The Center traveled to the Northeast Feb. 28 to present the study’s findings in three press conferences. Policy Director Kieran Suckling was joined in New York City by Helen Hays from the American Museum of Natural History; Policy Advocate Melissa Waage was in Providence, R.I. with Lou Perrotti from the Roger Williams Zoo; and Conservation Director Peter Galvin presented in Framingham, Mass. with representatives from the New England Wild Flower Society, Lloyd Center for the Environment, Connecticut River Watershed Council and Appalachian Mountain Club.

The findings on the northeastern species are the first in the continuing study, which aims to evaluate recovery trends for all of the more than 1,300 plants and animals protected under the federal Endangered Species Act. The Center is gearing up for a second release this summer of findings on recovery trends for the 260 plants and animals nationwide that have been protected under the Act since before 1980—those for which the most long-term data exist.

Meanwhile, the first phase of the Center’s study continues to garner press from media nationwide, signifying what we hope will be a large advancement in the ongoing battle to protect America’s most important wildlife protection law.

Success Story: The U.S. Atlantic population of the green sea turtle has steadily increased in numbers since being listed under the Endangered Species Act in 1978. The Center analyzed population data for 41 listed plants and animals in the Northeast; 38 of those species (93 percent) had remained stable or increased population numbers since being protected under the Act.

Cover story by Phoebe Garfinkel and Brian Nowicki