

**T**he year 2008 marks the 35th anniversary of the Endangered Species Act, which won overwhelming support in Congress in 1973, and then rapidly became one of America's most controversial laws, generating hundreds of legal challenges by government authorities, conservationists, landowners, and industry.

Resources asked Michael Bean, one of the nation's foremost authorities on the act, to reflect on the policy questions around endangered species and discuss where the issue is heading. Bean is chair of the Wildlife Program at Environmental Defense and an RFF Board member. He was interviewed by RFF Fellow Carolyn Fischer. Their conversation follows.

**Fischer:** What circumstances surrounded the creation of the Endangered Species Act and what followed its enactment?

**Bean:** The act became law with virtually no controversy. Senate passage was unanimous, and there was only a smattering of opposition in the House. That unanimity reflected widespread sentiment that the nation needed to safeguard its natural biological heritage, just as it protects landmark buildings and historic sites. The act was quite comprehensive, encompassing not only vertebrates but also invertebrates and plants. Today there are approximately 1,300 listed species in this country, the majority of which are plants.

However, the honeymoon was short-lived. Less than five years after enactment, conflict arose over the construction of the Tellico Dam on the Little Tennessee River, which put at risk a small fish, the snail darter. In 1978, the Supreme Court affirmed the authority of the Endangered Species Act, noting that Congress had spoken with absolute clarity—even to the extent of protecting a fish that had no obvious commercial or recreational value.

Then, about 10 years after that, another controversy arose involving the preservation of the northern spotted owl against logging activity in a large part of the West—Oregon, Washington, and northern California, involving large areas of public and private land. That dispute was a watershed because it showed that this law could affect more than isolated projects: it could disrupt whole economies in substantial and multiple ways.

**Fischer:** What is the status of the act today?

**Bean:** Currently, there is no serious effort to reauthorize the act, or even a high degree of consensus on how it might be modified. I think there is no prospect that this Congress is going to tackle this issue.

However, Congress is seriously considering measures to create stronger incentives for the private sector to cooperate with endangered species recovery work, including tax credits for conservation efforts by private landowners. That appears to have broad support from the White House and by both parties.

Of course, there are many administrative and regulatory measures—which don't require congressional action—that can strengthen

# ENDANGERED SPECIES

## *Progress and Pitfalls During Three Decades of Controversy*

A CONVERSATION WITH MICHAEL BEAN AND CAROLYN FISCHER





The San Joaquin kit fox is found in California's Central Valley.

or weaken the law. It has been reported that the Fish and Wildlife Service recently drafted proposed regulations that would limit the number of species that can be protected and curtail the acres of wildlife habitat to be preserved. They would shift enforcement of the act from the federal government to the states and dilute legal barriers that protect habitat from urban sprawl and logging or mining operations. Whether these proposals will actually be published is unclear.

**Fischer: Are new species continually being added to the endangered list?**

**Bean:** No. It has been more than a year since any species have been added, which is longer than at any time since the early 1980s. We know that some plants and animals are increasingly threatened because of commercial and industrial development, but the federal government has lagged in placing them on the list. One of the pos-

itive aspects of the Bush administration has been to encourage anticipatory approaches and take action to help species before they reach the point at which they need to be listed.

Another positive development is that three rather conspicuous and visible species were “de-listed” in early 2007, which is rather unusual. First was the Great Lakes grey wolf population, followed by the Yellowstone grizzly bear population, and shortly before the Fourth of July, the bald eagle was de-listed. These species had been on the first official list of endangered species since 1967. So it took four decades—getting from endangered to recovery is a long process.

**Fischer: Was there something unusual about these three species?**

**Bean:** Well, they are well-known, recognizable animals, associated with our national history, and they are somewhat charismatic in their allure. It is certainly true that the public recognizes a relatively few endangered species as iconic. The more prominent animal species tend to garner more public and financial support. They also are physically larger and occupy greater geographic regions—the bald eagle is present all across the country.

Whooping cranes are magnificent animals that had dropped in number to around 15 birds in the wild in the early 1940s. Six decades later, they are recovering but there still are only about 680 birds, and they will probably remain on the endangered list for many more years. By contrast, a small species like the Devil’s Hole pupfish, which lives in a sinkhole in Nevada, doesn’t attract much support—although its needs can probably be addressed reasonably well with a modest amount of intervention.

So it is indeed the case that there is a disparity as to where the money and attention go. Decisions are heavily influenced by public perception and by the history of wildlife management in this country. To be sure, birds and game animals have had a long history of attention from wildlife managers. In contrast, plants have received almost none, as have invertebrates and even some vertebrates like salamanders and small mammals. It’s not just a matter of putting dollars on the most popular species as it is putting dollars into conservation efforts that American wildlife management understands and can influence.

**Fischer: Does litigation help conservation efforts?**

**Bean:** That is a complicated question to answer. On the one hand, legal challenges have been necessary to force agencies to do what the law requires, or to give some species a chance for survival. At the same time, so much litigation has been filed over the years that it has been difficult for responsible federal agencies to manage the program because they are constantly sidetracked by the need to respond.

Litigation can have profound impacts, however. This year, the Supreme Court made a ruling that limited the application of a key requirement of the act to discretionary federal activities only. This

was in a case involving the transfer of authority for some provisions of the Clean Water Act from EPA to the state of Arizona, and it will have broad policy implications.

Another case that the court may consider this term regards the listing of the Alabama Sturgeon, now found only in Alabama and thus not involved in interstate commerce. Barge interests using the Tennessee-Tombigbee Waterway have asked the Supreme Court to declare the listing of the sturgeon to be beyond the federal government's constitutional powers.

**Fischer: Are private landowners becoming more active in preserving endangered species?**

**Bean:** Absolutely. In my own work, I realized—probably later than I should have—that the stringent regulations imposed on private landowners caused some of them to do the opposite of what we wanted them to do. They refrained from the sort of management that would make their land better habitat. They reasoned that if they ended up with more endangered species on their land, they could have even more restrictions placed on the uses of their property.

A few years ago, we began working with landowners in North Carolina on behalf of an endangered bird known as the red-cockaded woodpecker. Landowners told us that if they could be freed from the worry that their good deeds would be punished, they would follow through. So, we worked with the Fish and Wildlife Service to

create so-called Safe Harbor Agreements that essentially froze their regulatory burdens if they embraced good wildlife management practices. Today there are between 50,000 and 60,000 acres owned by some 101 owners in North Carolina enrolled in these agreements, and the idea has been even more successful in South Carolina and Georgia. Woodpecker numbers are on the rise and other threatened species are benefiting as well.

In Texas, cooperative Safe Harbor Agreements have probably ensured the salvation of the Northern Aplomado falcon. That species has increased from zero nesting pairs in the mid-1990s to at least 40 known nesting pairs, about two-thirds of the way to the target set for reclassifying the species from endangered to threatened.

**Fischer: Has the Bush administration encouraged such efforts?**

**Bean:** Early on, the administration announced two new programs—one called the Landowner Incentive Program and the other, the Private Stewardship Grants Program. They originally were envisioned as \$50 million initiatives, but in the president's budget proposal for 2008, no funding was requested for these programs. So that has been a disappointing abandonment of approaches that have been shown to work.

**When DDT was banned in 1972, bald eagle numbers began to rise.**



## Where ESA Has Succeeded and Where the Challenges Still Remain

### FIVE SUCCESS STORIES

**Gray Wolf.** Extirpated from most of its historic range as a result of shooting and poisoning, the gray wolf has made a steady comeback. Establishment of experimental populations of wolves in the Yellowstone area and in central Idaho, though initially controversial (the American Farm Bureau Federation and even some environmental groups filed suit challenging this action), have been remarkably successful. In 2007, the U.S. Fish and Wildlife Service declared the Minnesota and western Great Lakes population of gray wolves to be recovered and proposed to remove the northern Rocky Mountain population from the endangered list as well.

**Northern Aplomado Falcon.** Eliminated from the United States by the middle of the 20th century, this rare falcon has made a comeback: over the past decade, a breeding population in Texas of approximately forty pairs has been established. Key to the success of that effort has been the use of "Safe Harbor Agreements" to secure the cooperation of the ranch owners on whose ranches captive-bred falcons have been released. Over two million acres of private rangeland is now encompassed in these agreements. Meanwhile, in 2006, falcon releases began in New Mexico as part of an experimental population authorized there.

**American Bald Eagle.** Symbol of the nation, the bald eagle was declared fully recovered and taken off the endangered list just in time for Fourth of July celebrations in 2007. The banning of most uses of the pesticide DDT in the United States in 1972 made the eagle's recovery possible. Its recovery was accelerated by the heightened protection it received under the Endangered Species Act, acquisition of key habitats, and an aggressive effort to reintroduce the eagle into areas it had formerly oc-

cupied. As a result of these actions, eagle numbers have increased from fewer than 500 known breeding pairs in the lower 48 states in the early 1960s to over 10,000 today.

**Kemp's Ridley Sea Turtle.** Tens of thousands of adult females once clambered ashore in a single day to lay their eggs on the beaches of Mexico that served as the only known nesting sites for this species. By the 1960s, however, these remarkable "arribadas" were gone and only a few hundred females nested each year. Protection of the Mexican nesting beaches, establishment of a new nesting site in Texas as a result of "head-starting" hatchlings there, and strongly resisted requirements for American shrimp boats to use specially designed excluder devices to reduce turtle drownings have contributed to a steady increase in the turtle's nesting numbers.

**Whooping Crane.** The whooping crane has benefited from one of the longest sustained conservation efforts for any species in the United States. By the early 1940s, fewer than 20 birds could be found along the Gulf coast, where the crane winters. When its breeding habitat was discovered in Canada some years later, an intensive rescue effort was made possible. Captive breeding, establishment of a new migratory population entirely in the United States, and vigilant law enforcement has slowly but steadily rebuilt crane numbers to over 500 today. While full recovery is still many years away, the crane is demonstrably more secure than ever before.

### FIVE HIGHLY THREATENED SPECIES

**Ocelot.** Only a few dozen of these small spotted cats persist in two populations in extreme southern Texas, where little of its native thornscrub habitat remains. Efforts to construct a border fence along the Mexican border may prevent genetic interchange with more abundant ocelot populations south of the border. That development would seriously imperil the

future of this already beleaguered cat in the United States.

**Ivory-billed Woodpecker.** It is unclear whether this large woodpecker still survives. Presumed extinct for many decades, the woodpecker was reported sighted (and briefly filmed) in 2006 in the bottomland hardwood swamps of the Cache River National Wildlife Refuge in Arkansas. Despite intensive subsequent searches, however, there is no conclusive evidence that it survives today (and some controversy over the accuracy of the identifications made in 2006). The ivory-billed woodpecker's decline and possible extinction is due to the loss of its forested swamp habitat in the American South.

**Schaus Swallowtail Butterfly.** This extremely rare butterfly is restricted to a few small sites in the Florida Keys, where its remaining hardwood hammock sites could be destroyed by a hurricane. A successful captive breeding effort helped prevent the near extinction of this species following a previous hurricane.

**Alabama Sturgeon.** An ancient fish of the Mobile Basin, the Alabama sturgeon is one of the rarest fish in North America. In the past decade, only a handful of specimens have been found in the wild. Despite the sturgeon's extreme rarity, barge interests have asked the United States Supreme Court to rule that the listing of the fish as an endangered species is unconstitutional because it now occurs in only one state (formerly in two) and is no longer utilized in interstate commerce, though it once was.

**San Joaquin Kit Fox.** This small fox of California's Central Valley has lost most of its native habitat to intensive agriculture and urban development. Though protected as an endangered species since the first official federal list of endangered species was promulgated in 1967, the kit fox is likely rarer today than ever before.

Source: Environmental Defense



**The whooping crane has come back from near extinction to more than 500 birds today.**

**Fischer:** Can you give some examples of what owners are asked to do in various parts of the country?

**Bean:** Sure. It may involve some prescribed burning in longleaf pine forests in the southeastern United States, or restoration of riparian or wetland habitats in the West, which have suffered dramatically over the last 30 or 40 years. In Florida, owners are being encouraged to stem the spread of Kogon grass, an Asian invasive species that is very hard to eradicate once it is established, which is interfering with gopher tortoise populations.

In New England, the bog turtle is being helped by restoration of open, sunny, wetland meadows. This traditionally was accomplished by elk and buffalo grazing in pre-agricultural times, and then by farm animals. But with the decline of farming in the northeast, my organization has actually rented goats to beat back the undesirable woody vegetation and free up the areas that the bog turtle depends upon.

**Fischer:** When the act is eventually reauthorized, what changes would you recommend?

**Bean:** Three things. First, more attention needs to be given to incentives. The act now is largely prohibitory and doesn't have provisions that encourage landowners to do more than the minimum. This could change as the result of work by organizations like RFF to better measure the value of ecosystem services, and by establishing conservation banks and other market mechanisms to reward positive behavior toward endangered species.

Second, we clearly need to figure out a way to forge a more effective working partnership with the states so that better federal-state coordination can take place. And third, if we are really serious about preventing extinctions of any plant or animal in the United States—as the act now mandates—it is going to take resources that far exceed what Congress has provided up to now. Given ongoing climate changes, commercial development and residential expansion, and globalization trends, we need to invest much more in conservation and wildlife recovery efforts at every level of society. ■