

COVER STORY: PROJECT GREEN

The Race for Survival

Enlisting endangered species in the fight against global warming is either a brilliant tactical maneuver—or an arrogant abuse of the law.



By Jerry Adler | *Newsweek*

Ten years ago, when environmental lawyer Kassie Siegel went in search of an animal to save the world, the polar bear wasn't at all an obvious choice. Siegel and Brendan Cummings of the Center for Biological Diversity in Joshua Tree, Calif., were looking for a species whose habitat was disappearing due to climate change, which could serve as a symbol of the dangers of global warming. Her first candidate met the scientific criteria—it lived in ice caves in Alaska's Glacier Bay, which were melting away—but unfortunately it was a spider. You can't sell a lot of T shirts with pictures of an animal most people would happily step on.

Next, Siegel turned to the Kittlitz's murrelet, a small Arctic seabird whose nesting sites in glaciers were disappearing. In 2001, she petitioned the Department of the Interior to add it to the Endangered Species list, but Interior Secretary Gale Norton turned her down. (Siegel's organization is suing to get the decision reversed.) Elkhorn and staghorn coral, which are threatened by rising water temperatures in the Caribbean, did make it onto the list, but as iconic species they fell short insofar as many people don't realize they're alive in the first place. The polar bear, by contrast, is vehemently alive and carries the undeniable charisma of a top predator. And its dependence on ice was intuitively obvious; it lives on it most of the year, lurking near breathing holes to occasionally snatch a 150-pound seal from the water with one bone-crunching bite. But it took until 2004 for researchers to demonstrate, with empirically derived climate and population models, that shrinking sea ice was a serious threat to the bears' population.

On Feb. 16, 2005—the day the Kyoto Protocol to curb greenhouse-gas emissions took effect, without the participation of the United States—Siegel petitioned to list polar bears as endangered. Three years later her efforts met with equivocal success, as Interior Secretary Dirk Kempthorne—under court order to make a decision—designated the bears as “threatened,” a significant concession from an administration that has stood almost alone in the world in its reluctance to acknowledge the dangers of climate change. The Endangered Species Act (ESA), whose quaint lists of snails and bladderworts sometimes seemed stuck in the age of Darwin, had been thrust into the mainstream of 21st-century environmental politics. Break out the T shirts!

Or, maybe, not so fast. Polar bears, all 20,000 to 25,000 of them—a population that would fit inside some basketball arenas—have joined the 1,985 species of plants and animals listed as either “endangered” (in imminent danger of going extinct) or “threatened” (not quite endangered, but heading there), under the terms of the ESA. That requires the government to designate and preserve their “critical habitat”—the area necessary for their survival—and develop a “recovery plan” to keep them alive. While many endangered species live out their lives of quiet desperation far from the public eye—need we say more than “rock gnome lichen”?—getting your name in the papers as endangered can put you in a difficult spot, as numerous species have discovered over the years. That would include the formerly obscure spotted owl (the subject of a tug of war between environmentalists and loggers) and the snail darter, a three-inch-long freshwater fish whose critical habitat in the Tennessee River delayed

for months the completion of a \$130 million dam. (Congress finally passed a law specifically allowing the dam to be built, presumably condemning the snail darter to extinction—although scientists have since found the fish alive in other places.) Even now, a court battle is shaping up over another talismanic American species, the gray wolf, which was taken off the list on March 28—whereupon the citizens of Wyoming promptly shot at least 16 of them. Americans almost universally endorse the lofty goal of the act, which in roughly its present form was signed into law in 1973 by President Richard Nixon: to preserve the biological diversity of the planet as an end in itself. The species we set out to protect may be beautiful, like the Florida panther, or they may be useful, like the rosy periwinkle—or they may be considered pests, or for that matter even eat people, as the polar bear itself has been known to do. But the law makes no distinction between good and bad species, and, in theory at least, gives them precedence over most human needs—including economic ones. Conflicts inevitably arise, but most such disputes have been local, except when they become public-relations icons for environmental groups on the one side and free-market advocates on the other. But the polar bear is a national, indeed a global, cause, and the implications of Kempthorne's action could be enormous—as Siegel hopes, and pro-business groups fear.

This battle is playing out in the final year of the Bush administration, which has compiled an environmental record most environmentalists consider dismal. Since taking office, it has protected only 60 species—compared with 522 during the Clinton administration, and 231 during the one-term administration of the first President Bush. The Interior Department has consistently missed the deadlines for making listings, or for determining that a species should not be listed. (The law requires it to respond to a petition for listing a species within 90 days, after which the department may launch a further one-year review to collect necessary research; recently some decisions have taken more than two years.) It took an order from a federal judge to pry a decision on the polar bear out of Kempthorne, and that was one of only two domestic species proposed for listing since he took office in May 2006, compared with 50 turned down during that period. Instead, species have piled up on a “candidate” list, with an average waiting time that’s now up to 19 years. Ever-dwindling generations of yellowcheek

darter and Phantom Cave snail have been born, lived and died in this bureaucratic limbo. Allegations that political pressure against listing species sometimes outweighed the scientific evidence in favor led to the resignation of a high-ranking department official last year.

Kempthorne and Dale Hall, director of the Fish and Wildlife Service, agree that they’ve been slow to add listings, but blame environmental groups for monopolizing their time with endless petitions and lawsuits. (Other administrations also faced this crush of paperwork, of course, but changes in the law made the bureaucratic end of things much more onerous after 1997.) In any case, Kempthorne tells NEWSWEEK, his priority has been to study and manage the species already listed: monitoring population size, defining their critical habitats and drawing up recovery plans. “Of the species that are listed, we now have recovery plans for 80 percent of them,” he says. “That’s significant.” Moreover, he says, the logjam has now been broken. By Sept. 30, he promised, the department will determine the fate of 71 species now on the waiting list, nearly a quarter of the total. It’s likely that most of these will win designation as either endangered or threatened. Anyone eager to learn the fate of the sheepnose mussel or the interrupted rocksnail will know in a few months—although a quick scan of the list suggests that most of the species constitute a group of plants from Hawaii so obscure they have only a scientific, rather than a common, name. It would not be surprising if much of their critical habitat was relatively small, overlapping and probably not of much interest to the oil industry.

And it certainly isn’t any part of Kempthorne’s plan for the polar bear to save the Earth. That was Siegel’s idea: that the law requires the government to protect the critical habitat of endangered species. Ergo, if global warming is threatening the polar bear’s habitat, the government could be forced to crack down on greenhouse-gas emissions, a step that environmentalists consider vital to the survival even of species that live in houses and would never dream of biting the head off a walrus.

The Interior Department came to agree that the polar bear was threatened by climate change, although it took a while for it to get there. “This is cutting-edge science,” says Hall, explaining why the department missed the original deadline set in January to rule on



Siegel's petition. "I needed time to understand it." That was another way of saying that the decision was not, as some critics have charged, actually delayed to avoid complicating the sale in February of oil and gas leases on 29.4 million acres of polar-bear habitat in the Chukchi Sea. The two matters were "not at all" related, says Kempthorne.

The case for listing the polar bear was, however, complicated by the fact that its numbers are not actually declining across their range; in fact, there are probably more polar bears alive now than a few decades ago, before the United States banned trophy hunting. (It's still allowed in Canada.) But then last year the U.S. Geological Survey—which itself is part of the Interior Department—reported that if sea ice continued melting at the rate projected by current climate models, two thirds of the world's polar-bear population would be wiped out by the middle of the century. At the press conference announcing his decision, Kempthorne showed satellite imagery indicating that the Arctic ice cover last year fell to the lowest level ever recorded, 39 percent below the long-term average. It broke the previous record low, in 2005, by 460,000 square miles, an area larger than Texas and California combined. And although it's still early in the season, there is a 59 percent chance of another record low by the time the ice reaches its minimum in September, says Sheldon Drobot of the University of Colorado's Center for Astrodynamics Research. Viewing images of broken ice in parts of Hudson Bay and the Beaufort Sea last week, he called the situation "anomalous, and a little bit disconcerting."

Polar bears depend on sea ice to hunt for ringed and bearded seals, their main food source. "The ice is a platform to hunt seals, and if they don't have that platform they are in big trouble," says Ian Stirling,

research scientist emeritus at Environment Canada in Edmonton. The bears are poor swimmers, and in the open water seals can easily evade them. Steven Amstrup, senior polar-bear scientist at the USGS Alaska Science Center in Anchorage, remembers when in some years the sea ice would never leave the shores of the Beaufort Sea. Now in summer it retreats as far as 600 miles off the coast, putting the seals, who prefer the shallow water near the shore, out of reach of the bears. The one-year survival rate for new cubs has dropped to 40 or 45 percent from 60 to 65 percent two decades ago, which Amstrup believes may result from the presence of more open water (cubs perish after 10 minutes in freezing water) and areas of rough ice that females with new cubs might have difficulty negotiating. Scientists have also witnessed a handful of cases of drowning, cannibalism and starvation among polar bears, things they've rarely—if ever—seen before. "We can't say that those events were definitely caused by global warming or any other particular event," says Amstrup. "But they are consistent with the changes in the environment that we've been seeing."

In accepting the science, however, Kempthorne made it clear he was rejecting Siegel's interpretation of the law. "Endangered" species get the highest level of protection; anything that threatens their survival—or, for that matter, a single individual—is outlawed. By listing the bear as "threatened" instead, Kempthorne gave the department leeway to decide which level of protection to apply. Specifically, he promised not to allow the Endangered Species Act to be "abused" by environmentalists to affect global-warming policy. "This listing," he warned, "will not stop global climate change or prevent any sea ice from melting." To the Bush administration and to its allies in the business community, it's self-evident that the act was meant to cover the kind of threat a steamroller poses to a Santa Cruz long-toed salamander, not that which an SUV in Atlanta poses to a polar bear, by way of the atmosphere. To Kristina Johnson of the Sierra Club, "it's like the administration has admitted the polar bear to the ER but now is leaving it to die."

Authorities on environmental law don't necessarily agree with the government's interpretation, either. The whole point of the act, they say, is to protect critical ecosystems, not just species in isolation. "It's lawful, and Congress was well aware of that when it enacted the law in 1973," says Patrick Parenteau, a professor at

the Vermont Law School. “You can’t artificially decide what has an effect on the species. If it’s being listed because of climate change, you can’t turn around and say, ‘We’re not going to take climate change into account.’” Siegel was disappointed, although hardly surprised, by Kempthorne’s position. At least in the short term, the main impact of listing the polar bear will be on American hunters who shoot bears in Canada; they will now be prevented from bringing their trophies back into the United States. “I suppose we’re doing what they’re accusing us of doing,” Siegel says, meaning using the polar bear to achieve a broader environmental goal, “but [the administration] just frames it in this weird, misleading way. They oppose regulation on behalf of industries concerned about short-term profits, not about the future of our children and grandchildren and the world they live in.”

The accusation about profits might be a sly reference to a former top official of the Interior, deputy assistant secretary Julie MacDonald, who resigned last year one week before Congress opened an investigation of how she handled Endangered Species listings. The resulting report, issued May 21 by the Government Accountability Office, found that she had consistently ruled against positions advocated by Fish and Wildlife Service biologists. According to the report, MacDonald took a particular interest in a petition to list the white-tailed prairie dog, whose habitat in four Western states is also coveted by ranchers, developers and energy companies. The Center for Native Ecosystems presented research indicating that the animal’s range has shrunk by 92 percent from its historical extent. Investigators found that MacDonald—who is not a biologist—deleted and rewrote portions of the report by Fish and Wildlife Service scientists, reducing the extent of the threat that oil and gas drilling posed to the prairie dog. The report also charged that she pressured staffers to make critical-habitat designations smaller than field biologists had recommended. The GAO report did not accuse her of any illegality; it merely raised strong suspicions that under her watch decisions that were supposed to be made on the science were tainted by politics. MacDonald has refused to comment on any of this, including to NEWSWEEK, but in a letter she wrote to the department’s inspector general after her resignation, she charged that the department’s internal review of her work was based on “inaccurate and incomplete information.” MacDonald has not yet responded to the GAO report published last month.

In the wake of the episode, Kempthorne ordered a review of the decisions taken under MacDonald’s watch, and found eight cases that warranted another look, the white-tailed prairie dog among them. Seven of those decisions, most a question of where to draw critical-habitat boundaries, were reversed or sent back for additional review, including the negative recommendation on the white-tailed prairie dog. Also getting a reprieve is the Preble’s meadow jumping mouse, which under MacDonald had been proposed for removal from the list; the listing will be amended instead. Kempthorne, acknowledging that the 73,000 people in his department may have “different ways to interpret things,” says that MacDonald was an anomaly. “Our responsibility is to look at the science,” says Hall, “and once we figure out what we think the truth is, our only agenda is to follow the truth.”

Environmentalists are also trying to reopen the case of the greater sage grouse, a chicken-size bird of the grasslands of the Intermountain West. A petition to list the grouse was rejected in 2005, after MacDonald extensively edited the scientists’ report—at one point disputing, according to a copy obtained by NEWSWEEK, the biologists’ description of the bird’s diet. A federal judge has ordered a review of that decision, on the ground that it was based on faulty science supplied by oil and gas interests. Grouse have the misfortune to be uncomfortable around drilling rigs and gas wells, a problem since about 90 percent of their habitat in Colorado has been leased for energy development. “Vertical structures put them on edge because historically that’s where raptors perch. So when a gas well appears, they get out of there,” says Gary Graham, director of Audubon Colorado, an affiliate of the National Audubon Society. “Studies show that when you build a well, the grouse will show up for a couple years, but eventually they disappear.” The state of Colorado is planning to restrict oil and gas drilling during the birds’ mating and nesting times, a total of about 90 days a year—regulations that the oil companies view as an effort to “scale back the oil and gas industry,” according to Americans for American Energy, an industry trade group.

Another Western species that conservationists are eyeing is the wolverine, a reclusive, but ferocious, predator like an oversize raccoon that lives in the northern Rockies, patrolling home territories that can cover hundreds of square miles and feeding off deer

and elk carcasses. Wolverines, which den and give birth in snow caves, are also threatened by global warming, as the mountain snowpacks melt earlier in the spring. A petition to list them drew opposition from the recreational-snowmobile industry, which doesn't want to risk being ordered out of the animal's critical habitat. That's not unrealistic. "Where there are snowmobiles, there are few wolverines," says Dave Gaillard of Defenders of Wildlife. In Montana, researchers witnessed a wolverine mother abandoning her den and carrying her kits away when snowmobiles ventured nearby. The petition was turned down earlier this year, on the ground that there are healthy populations of wolverines in Canada and Alaska, so why worry about the ones in Montana? But by the same rationale, the bald eagle—one of the great success stories of the Endangered Species Act—might never have been listed, either; there were always plenty of those in Canada and Alaska, too.

The gray wolf—a species unrelated to the wolverine—is another success story. After being listed in the Lower 48 states in 1974 and reintroduced to the northern Rockies in 1995, it came off the list this March, as its population reached an estimated 1,500 in Montana, Wyoming and Idaho combined. That may not sound like very many, but it was enough to inspire the region's hunters, and its sheep and cattle ranchers, to get their rifles out. A new Wyoming law allows wolves to be shot on sight in a "predator zone" that covers 90 percent of the state, and residents wasted no time. Three wolves fell on the first day, including an aging male with a limp who was known to tourists as Hoppy. In April, two wolves in Ashton, Idaho, were shot by a rancher who spotted them hanging out near his horse corral. He had to chase one a mile on his snowmobile before downing it. In the past, wolves could be shot only for approaching sheep or cattle with hostile intent. But under a new Idaho law, they can be killed for "worrying" livestock. Since sheep get understandably nervous if a predator just walks past them, this pretty much puts the burden of avoiding getting killed on the wolf. The county prosecutor's office investigated the shootings but determined they were justified. Now both sides are up in (metaphorical, so far) arms: environmentalists suing to overturn the delisting, and ranchers who think extinction is exactly what the wolves deserve, at least in their part of the world. (Hunters would like to keep just enough of them around to shoot.)

To wind up in federal court is the fate of much of American wildlife now. One might well ask whether the term "wildlife" has any meaning when the creature in question is tracked by satellite across its designated swath of critical habitat that's been drawn up by negotiation among bureaucrats who wouldn't recognize a flattened musk turtle if it landed in their soup. Even the majestic polar bear, roaming the far reaches of the Arctic, is exhibit A in lawsuits planned by conservation groups aimed at getting the government to act more aggressively to save it, and also in a suit announced by Alaska Gov. Sarah Palin to reverse the listing, on the ground it might hurt the state's oil- and gas-dependent economy. (And another one by a big-game hunting group, protesting the ban on importing trophies.) The fate of the entire planet is a lot of responsibility to lay on just 20,000 bears, but those are the rules set by the only species whose opinion counts at the moment. Let's hope it chooses wisely.

With Daniel Stone in Washington, Anna Kuchment in New York and Paul Tolme in Arcata, Calif.