nature

www.nature.com/nature

Vol 454 | Issue no. 7208 | 28 August 2008

Doubly endangered

The landmark Endangered Species Act in the United States needs more flexibility and fresh thinking — but not of the kind being advocated by the Bush administration.

In 1995, then-US Senator Dirk Kempthorne (Republican, Idaho) wrote to *The New York Times* decrying accusations that his effort to reform the Endangered Species Act was actually an attempt to dismantle it. The debate had become "so polarized", Kempthorne wrote, that anybody advocating change would be "quickly tagged as anti-environment".

He had a point. The act, among the most wide-ranging environmental laws in the world, is designed to protect any critically endangered species in the United States from extinction by any form of economic development. It was passed in 1973, when environmental idealism pretty much trumped every other consideration — not a single senator voted nay. But opposition built quickly, as people began to realize that the word 'species' applied not just to photogenic bald eagles, but to fish, rodents, plants, insects and a host of other organisms they had never heard of. The snail darter fish and the spotted owl could stop major dam-building and logging operations in their tracks. Many Americans came to see the act as a symbol of federal regulation run amok — even as committed environmentalists came to see it as the ultimate backstop, the statute whose powers could be invoked when all other planning and conservation tools failed.

Thus Kempthorne's frustration. His 1995 effort in the Senate to reform the act was ultimately futile, but it was a serious attempt to seek common ground on the issue.

Thirteen years later, Kempthorne is Secretary of the Interior in the Bush administration and he can no longer make that claim. His latest efforts to alter the act are neither benign nor bipartisan. Currently, federal agencies giving permission for any project such as a road, a dam or logging must consult with the US Fish and Wildlife Service to ensure that no endangered species are at risk. But under Kempthorne's latest proposal, announced earlier this month, agencies would be allowed to skip that step if their own analysis finds such action unnecessary. In the wrong hands, this authority would effectively end oversight on projects and promote the relentless development that is steadily consuming the world's remaining natural habitats.

Exaggerated burden

There is a lot to be said for addressing the Fish and Wildlife Service's workload; its biologists are swamped with tens of thousands of project consultations each year. But that problem is best addressed by giving the agency more money and people, and perhaps by finding ways for other agencies to share the paperwork — not by gutting the concept of scientific review.

More broadly, critics of the act should concede that its burdens have been greatly exaggerated. Although the law has a powerful regulatory hammer, it is seldom deployed; permits for projects known to harm species or their habitat are granted all the time. Nor is the act inflexible. Administrators have developed creative mechanisms that provide incentives for landowners to manage their land to benefit threatened or endangered species.

At the same time, environmentalists who tirelessly defend the act would be wise to acknowledge its faults. It has indeed helped to rescue high-profile species from the brink of extinction, and served as the catalyst for conservation efforts that go well beyond individual species. One example is regulation of the Edwards Aquifer in semi-arid southern Texas, the water source not only for the fountain darter fish and other imperilled species but also for 1.7 million Texans. But the numerous controversies engendered by the act have sparked a backlash that has set back the cause of conservation. "Shoot, shovel and shut up," goes a common rural refrain.

"Environmentalists who tirelessly defend the act would be wise to acknowledge its faults."

Moreover, protection under the act for individual species and their habitat is generally doled out by judges, not biologists. And when it comes to habitat loss in general — the biggest threat — the act is quite constrained. Although protecting 'indicator' or 'keystone' species can bring about broader habitat protection that benefits other species, this the approach is still, at its core, purely reactive.

Looking forward

What is needed is a proactive system for evaluating and protecting habitat and biodiversity and the benefits they bring to people. How to go about that task is a difficult question, but one that the international biodiversity community is actively pursuing. One proposal is for a biodiversity science panel under the United Nations, similar to that for global warming. Another is a biodiversity monitoring network to gather hard data on a global scale. We commend and encourage these efforts. Nevertheless, each nation will ultimately need to apply any lessons learned within their own legal frameworks.

Were policy-makers in the United States to start from scratch and rewrite the Endangered Species Act today, they would probably come up with something quite different — including an emphasis on the kind of broad habitat plans that would protect healthy species before they begin to decline.

Unfortunately, amending the act has proved almost impossible (the last significant change was in 1982). But even within the existing framework, there is room for the next administration to manoeuvre. Former interior secretary Bruce Babbitt, who served under President Bill Clinton, initiated the first conservation plans designed to protect multiple species — including many that were not yet listed. And although subsequent implementation and monitoring have fallen short on some of these plans, the principle remains sound.

In this context, the fact that creative regulations have been implemented under the existing statute might well be the only cause for optimism in an otherwise stale debate. ■