

holm environmental conference last June, but that was not to be, either.

As time went by, a number of the rare animals that a strong convention might have protected declined precipitously. In 1968, for example, the number of ocelots imported to the United States alone (counting pelts and live animals) reached 129,000. Even as the numbers of ocelots surviving in the wild diminished, the number imported in 1969 rose to 133,000. Then, in the following year, it turned down to 88,000 as a shrinking supply took the measure of demand. Many of these animals were sold as pets, and it is worth noting that the number of pet stores in the United States nearly quadrupled (from 2300 to 8500) during the period of the wildlife convention's slow evolution.

At the same time, though, some U.S. officials see an overall benefit in the years of delay. In concert with a rising level of international concern for the environment and a waning of the cold war, more nations became willing to subscribe to a stronger system of protection. Train, for whom the convention has been a personal project for more than a decade, views the Stockholm conference as a major watershed in this respect. And, indeed, 2 years ago, it probably would not have been possible to bring together the delegates of 100 nations (the only major absentee is the People's Republic of China) under one roof to talk about the destiny of the hook-billed hermit and the orange-footed pimpleback clam, not to mention polar bears and whales and spotted cats.

The lists of animals to be protected are, of course, the heart of the agreement. And it is here that most of the haggling and horsetrading, and deleting and adding, remains to be done. It is also in this area that the 1971 draft version has been most notably altered—by expanding the number and variety of species to be considered for protection. All told, the lists now tentatively encompass 133 species or genera of animals and 13 species, genera, or, in a few cases, whole families of plants. In addition, another 54 animals are listed "for purposes of discussion," although the IUCN says there are neither strong arguments for inclusion or exclusion at this time. The lists are based on a "red book" of endangered species compiled by the IUCN; selection of plants and animals from this list turns on whether international commerce plays a role in their decline, although there are some prominent exceptions to this rule.

Briefly, the first list of threatened species—those deemed on the brink of extinction and subject to the strictest controls—tentatively includes the following:

► **Birds:** 34 species, among them peregrine falcons; 14 parrots and parakeets, mostly from Latin America and the Caribbean; rock fowl; 7 exotic pheasants.

► **Mammals:** 51 genera and species, including the spotted cats; all lemurs; gibbons, orangutans, several monkeys, and the mountain gorilla; the fur-bearing vicuña; wild cattle except bison; bowhead, right, blue, and humpback whales; marine and tropical otters; 4 species of rhinoceros; 3 species of tapirs; and the Amazonian manatee.

► **Reptiles:** 33 species and genera, including 7 crocodilians; the Galapagos tortoise; 3 species of marine turtles; and the much maligned Komodo dragon.

► **Mollusks:** include 24 species of rare clams and one, emerald green, snail.

► **Plants:** the National Orchid of Colombia; welwitchia; and 3 species of cycad.

The second tentative list, of animals and plants to be accorded less strict control, includes all owls; Mexico's quetzal bird; the fin whale; chimpanzees; the remaining gorillas; the gray wolf; the Atlantic salmon; the American alligator; the polar bear; 3 more sea turtles; and the Gila monster of the American Southwest and its Mexican relative, the beaded lizard.

Considered for inclusion on one list or the other, but deleted, were several animals of commercial significance. Among them were sturgeon that support a diminishing Soviet caviar industry; kangaroos, whose meat and hide are the objects in trade for a sizable business, subject now to regulation by the Australian government and a ban on importation in the United States; and the sperm and sei whales, which, along with the finback, have come to bear the brunt of Japanese and Soviet whaling. Also absent and apparently not considered for protection are several rare and dazzling tropical butterflies whose fate lately has been to end up in alarming numbers of American homes, mounted in plastic and displayed as chic bric-a-brac.

The inclusion of whales in the proposed agreement is an improvement over the 1971 draft, and it raises the possibility of leashing the rapacious fleets of Japan and the Soviet Union where the International Whaling Commission—the only regulatory body extant—has largely failed. The protection of the endangered species convention may, on the other hand, be of less practical value to whales than meets the eye. Two of the three main species

preyed upon by whalers are not being considered for protection. Moreover, some U.S. officials consider it unlikely that any new wildlife secretariat would be so bold as to press for fewer import permits than the IWC's killing quotas would imply. Between international regulators, politesse usually prevails; it is more likely that the wildlife secretariat would be satisfied with whatever number of permits the IWC's controversial—and, by almost universal agreement among conservationists, inordinately large—quotas require.

In any case, U.S. negotiators feel no compulsion, as one participant puts it, "to fall on our swords" for the sake of particular species. Compromises will be made, for the objective now is to build a legal ark of sorts for the earth's threatened flora and fauna; the passenger list can always be revised later, or so this strategy goes.

—ROBERT GILLETTE

APPOINTMENTS

James L. Liverman, professor of biomedical sciences, University of Tennessee, to director, division of biomedical and environmental research, U.S. Atomic Energy Commission. . . . **William M. Kays**, chairman, mechanical engineering department, Stanford University, to dean, School of Engineering at the university. . . . **Chandler A. Stetson**, chairman, pathology department, New York University, to dean, College of Medicine, University of Florida. . . . **Carl F. Long**, professor of engineering, Dartmouth College, to dean, School of Engineering at the college. . . . At the University of Pennsylvania School of Medicine: **William J. Mellman**, director, Genetics Clinic, Children's Hospital of Philadelphia, to chairman, genetics department and **Harry Wollman**, professor of pharmacology to chairman, anesthesia department. . . . **Peter Suedfeld**, chairman psychology department, University College, Rutgers University, to head, psychology department, University of British Columbia. . . . **Debdas Mukerjee**, director of basic research in pathology, University of Texas Medical Branch, Galveston, to director, Inter-mountain Cancer Institute. . . . **John J. Eisch**, chairman, chemistry department, Catholic University, to chairman, chemistry department, State University of New York, Binghamton.