

Action for Wildlife: Less Than Meets the Eye

There has been, on the surface at least, some recent forward movement in the U.S. Fish and Wildlife Service's efforts to protect endangered animals and plants. Ten U.S. and Mexican animal species were proposed for addition to the official endangered and threatened species lists last week, and proposed regulations were published in the *FEDERAL REGISTER* for protecting 216 more animals and plants from around the world. Observers, however, in both the Government's endangered species office and the wildlife conservation movement, are taking the actions for less than surface value.

The final proposed listing of eight animals to the endangered list and two to the threatened list (those not believed in danger of imminent extinction) is a culmination of several years effort on their behalf by the Government and conservation groups. Listed as endangered were the American crocodile, the Cedros Island mule deer, the Peninsular pronghorn antelope, the Hawaii creeper, the Scioto madtom (a small Ohio fish), the Po'o uli (a Hawaiian bird), the gray bat and the Mexican wolf. Listed as threatened were the bayou darter and Newell's Manx shearwater.

After a required waiting period of 60 days, the species will be officially added to the 112 endangered and nine threatened species already listed by the U.S. Department of Interior. (There will be procedural delays, however, in listing the gray bat and Mexican wolf.) The new status will proffer to them the extensive protective machinery of the Endangered Species Act of 1973.

Conservationist Lewis Regenstein, head of the Washington-based Fund for Animals, is ambivalent over the listing. "Listing these animals is so long overdue that I just can't get too excited about it, even though they will be protected now. There are, for example, only 12 Cedros island mule deer left, and about a dozen breeding female crocodiles. The Department of Interior has had information on their imperiled status for years, and to me, it is just incredible that they could have waited so long. The Government," he says, "has obviously adopted a policy of waiting until a species is just about to perish and there are only a handful left before it will act."

In its other major action, the U.S. Fish and Wildlife Service, with its *FEDERAL REGISTER* publication, began the process for adding 74 plants and 171 more animals (most of them from outside the United States), to the endangered species list. These include several bread palm, aloe, mussel and orchid species, and among



Timber wolf: Appendix I to endangered.

many other animals, the Asian elephant, the grizzly bear, the peregrine falcon, several parrots and parakeets, the leopard, the jaguar, the lemur and the proboscis monkey. The 216 plants and animals are now listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. This international agreement was written by the United States and 80 other nations in March 1973. It protects endangered wildlife from commercial international trade with some outright trade bans, and with the requirement that licenses be issued by both importing and exporting nations for most listed animals.

The United States, however, has yet to establish the specific rules and regulations

to be used at ports of entry and, in effect, does not enforce the international agreement, Interior Department sources say.

The new action is apparently a step toward protecting the endangered Appendix I plants and animals, proposing to add them directly to the U.S. endangered species list and protect them from commercial exploitation in that way, rather than through the international agreement. But a government official in the endangered species office who refuses to be named told *SCIENCE NEWS*, "This action is just plain window dressing." Listing the 216 plants and animals in the usual manner would take "literally years," he says, "and this action is designed to obfuscate the fact that no action has been taken to write rules and regulations to implement the international agreement at our borders, even though it has been over two years since the conference, and we were the leaders in setting it up. The responsibility for this delay, he says, is "benign bureaucratic neglect," beginning with program chief Keith Schreiner.

Schreiner does not see things this way. "This window dressing idea," he told *SCIENCE NEWS*, "is dead wrong." Rule-making progress is being held up by the Office of Management and Budget and President Ford's signature. "Once an executive order is signed to start the rule-making, we could move ahead on it full speed. We could even begin to protect the animals and plants at our borders before the rules and regulations are laid down in writing. I hope that this all happens," he says, "within this calendar year." □

Propellants: New actors in troposphere?

Aerosol propellants have thus far been billed as the dramatic heavies on a stratospheric stage. According to theory, they absorb ultraviolet light energy through a "window" in the stratosphere, and release reactive chlorine molecules which catalyze ozone destruction.

Fluorocarbon propellants 11 and 12 are now being introduced for the first time as antagonists on a tropospheric (lower atmosphere) stage. A new theory, based on a very simplified model of the atmosphere, casts propellants as absorbers of infrared radiation through a second atmospheric window. The denouement, set in the year 2000 and acknowledged to be speculative, pictures an earth warmed by a fluorocarbon-induced greenhouse effect as a result of this infrared absorption. Thus, there are now two potential concerns over propellants—their possible reactions in the upper atmosphere leading to ozone destruction

and their possible reactions in the troposphere leading to a greenhouse effect.

It is not too surprising, however, that there are already objections to the greenhouse theory, calling it "premature" and "dangerous."

The new theory is presented in the Oct. 3 *SCIENCE* by atmospheric physicist Veerebhadran Ramanathan of the NASA Langley Research Center in Hampton, Va. He bases his theory on experimental evidence that fluorocarbon propellants absorb infrared radiation (heat) in the 8 to 13 micrometer region, but not in other solar radiation wavelengths.

He postulates that infrared radiating from the earth's surface in the 8 to 13 micrometer region will be absorbed by propellants that build up in the lower atmosphere as they drift up toward the stratosphere. Estimates place the current tropospheric levels at about .1 or .2 parts