

ENDANGERED SPECIES

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Endangered Species Program, Washington, D.C. 20240

Lacey Act Amendments Aid Plant Conservation

On November 16, 1981, President Reagan signed into law amendments to the Lacey Act which prohibit interstate sale of rare plants collected in violation of State laws and plants protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The amendments also incorporate the Black Bass Act and increase the penalties for all violations of the Lacey Act.

Existing State plant conservation programs and legislation have been considerably hampered by the lack of State jurisdiction over plant sales beyond their borders. The amendments, which

allow the Federal government to investigate such apparent violations anywhere within the United States, should serve as a deterrent to illegal traffic of State protected species.

The market for certain plants, including cacti, orchids, and several carnivorous (insectivorous) plants, is quite lucrative. Therefore, in the recent past suppliers have not hesitated to violate State laws as well as regulations that protect plants in national parks and other Federal lands.

Cacti from the Southwest deserts are particularly sought after. In 1979, Arizona's "cactus cops" arrested 91 vi-

olators of that State's permit program. Despite this enforcement effort, "rustlers" stole an estimated \$500,000 worth of cacti from the State, including 400 saguaros. These giants are often sold for several hundred dollars apiece.

Plant theft, however, is not confined to the desert. Many of Florida's protected plants, including orchids, bromeliads, and pitcher plants, are also often taken and sold in interstate trade.

Law Protects Candidate Plants

Although a number of State listed plants which will be protected by the

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In Memory

On December 10, 1981 Dr. Howard "Duke" Campell died at age 46 in Gainesville, Florida. Duke was a dedicated conservationist whose work in the Endangered Species Program was marked by intense enthusiasm and spirit. His good judgement, fine sense of humor, and dedication were greatly valued by his friends and colleagues, and his efforts on behalf of the conservation movement will be sincerely missed.

Duke entered the Service as a staff herpetologist with the Office of Endangered Species in Washington, D.C., and then transferred to the Denver Wildlife Research Center's Gainesville Field Station. As Supervisory Zoologist at the field station, Duke's research centered on studies of manatees and nongame species on National Wildlife Refuges in the Southeast. He was an internationally recognized herpetologist and leading expert on crocodylians—he chaired the IUCN's Crocodile Specialist Group.

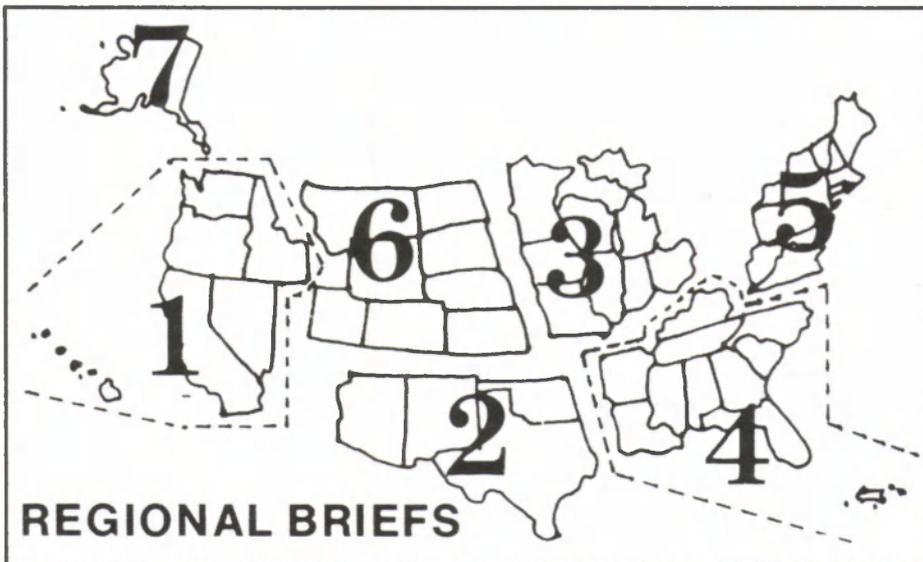
Duke is survived by his wife Kathy and their two children, Mariel and Colin. The family has requested that those wishing to honor Duke make contributions in his name to the Florida Defenders of the Environment, the National Audubon Society, or the Sierra Club.

Black-footed Ferret Findings Give Biologists New Hope



Photo by U.S. Fish and Wildlife Service

News of several black-footed ferret (Mustela nigripes) findings have given renewed hope for what is perhaps North America's most endangered mammal. This photo was taken in Park County, Wyoming, in November 1981. For more information see this issue's Regional Briefs—Region 6.



Endangered Species Program regional staffers have reported the following activities for the month of November:

Region 1—Between August 17 and 22, 21 birds were trapped at Hawaii National Park for use in a forest bird dis-

ease study by the University of Hawaii. Four were native to the Island of Hawaii (all were Amakihi), the balance being house finches (7), white eyes (5), rice birds (3), and linnets (2). Preliminary examination of all blood stains from the 21 birds did not reveal any malaria or

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U.S. Fish and Wildlife Regions

Region 1: California, Hawaii, Idaho, Nevada, Oregon, Washington, and Pacific Trust Territories. **Region 2:** Arizona, New Mexico, Oklahoma, and Texas. **Region 3:** Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. **Region 4:** Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the Virgin Islands. **Region 5:** Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia. **Region 6:** Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming. **Region 7:** Alaska.

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other protozoan agents. Disease is thought to be a major threat to Hawaii's Endangered forest birds.

A status survey report was completed on the Amargosa toad (*Bufo nelsoni*). The toad is presently known to occur at one previously-known and three closely-spaced new sites. A comparison of literature records indicates either that the range of the toad is reduced from the past or that misidentifications have confused the issue.

Region 2—Endangered Species Specialist, Jack Woody, traveled to the Mexican southwest coast to review, evaluate, and learn about sea turtle projects co-sponsored by the Service and the World Wildlife Fund. Attention will be focused on the green turtle nesting beaches, with field projects under the leadership of Kim Clifton.

In order to perpetuate the most endangered Colorado River endemic, 41,500 young bonetail chubs (*Gila elegans*) were stocked into Lake Mohave. The fish, which were 1981 young of the year from Dexter National Fish Hatchery, averaged 4 inches in size.

From June to September 1981, a total of 15,100 razorback suckers (*Xyranchea texanus*) have been stocked in the Gila River drainage. Five of the stocked razorbacks were recently accidentally captured from the Gila drainage, indicating that the species is surviving. (See the September 1981 Bulletin for more information on the stocking program.)

Under the terms of a Service Loan Agreement, the Rio Grande Zoological Park in Albuquerque received a female Mexican wolf and will receive a male at a later date. The agreement was made in the interest of dispersing Mexican wolves among a number of institutions and in an effort to avoid the possibility of a catastrophe affecting all of the animals in the U.S.-Mexican cooperative captive breeding program. It is estimated there are fewer than 30 of the wolves left in the wild, and the species is rapidly nearing extinction. There are ten wolves in the captive breeding program. In addition to the Rio Grande Zoological Park, animals are being maintained at the Arizona-Sonora Desert Museum in Tucson, and the Wild Canid Survival and Research Center Wolf Sanctuary in St. Louis.

An article on Dexter National Fish Hatchery appeared in the November-December 1981 issue of "New Mexico Wildlife." Entitled "A Refuge for Southwestern Fish," the article gives historical and current information about the hatchery and the fish maintained and bred there.

Region 4—The Florida Department of Natural Resources' slow speed boating
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Service Assists Foreign Conservation Projects

Photo: Courtesy of International Crane Foundation



*Through cooperative programs in the U.S.S.R. and foreign currency funded projects in India, the Service accommodates research in the wintering and breeding grounds of the Endangered Siberian white crane (*Grus leucogeranus*). Work, largely conducted by the International Crane Foundation, includes captive reproduction, reintroduction, and public awareness activities.*

Since the problems facing Endangered species are global in scope, and because species loss in general is accelerating throughout the world, cooperation among nations is essential if we are to maintain a healthy and diverse biosphere. We therefore have asked the International Affairs Staff to highlight some of the Service's major responsibilities and activities in other parts of the world. First in a series of articles is an overview by acting chief Larry Mason.

The mission of the Fish and Wildlife Service is predominantly domestic, involving the management of wildlife and its habitats across a broad expanse of territory and in nearly every conceivable ecosystem. Over half the world's wildlife biologists work in this country, and they are at the top in their field. Unfortunately, however, this has not always been the case. Wildlife management probably began in North America around 1646, when the Virginia settlers ordered a closed season on deer because they had been thoroughly overhunted in the English colonies—less than four decades after the landing in Jamestown.

And yet, for all the folly of the early colonists, it is through lessons learned from such mistakes that we have turned the tide for a number of other species, adopted measures for precise habitat management, developed ecological profiles for land use planners, and placed important tools in the hands of developers which allow wildlife considerations to be taken into account as never before.

It is little wonder that much of the world looks to the United States for leadership and guidance in managing wildlife and habitats. Regardless of how we individually feel about the job the Service performs, we are perceived abroad as the standard.

Succeeding Congresses and Administrations in the last 50 years have also assigned the Service, under 11 statutory authorities, a variety of international duties. The U.S. also is party to over 24 treaties or conventions with foreign nations which give further international responsibilities to the Service. These treaties and conventions do not simply have the same effect as statutes; they are the law, and the Service is bound to them. We can just as easily be taken to court over our failure to fulfill a convention responsibility as for failing to carry out a legislative requirement.

The earliest treaty involving the Service was probably the 1909 Treaty between the U.S. and Great Britain (on behalf of Canada) concerning boundary water issues. The earliest migratory bird treaty (1916) was also with Great Britain, again acting for Canada, and today there are such treaties with Mexico, Japan, and the USSR as well. Additional treaties, to which the Service is an active representative, govern the take of salmon in the North Atlantic. Lacey and Black Bass Act amendments have served to prevent the U.S. from encouraging over exploitation of foreign species. More recently, in 1973, the Convention on International Trade in Endangered Species of Wild Fauna and Flora has bound the Service together in

a set of shared responsibilities with fully one-third of the nations on our globe.

By and large, each of these treaty and statutory responsibilities align themselves with a major program area of the Service, whether it is Endangered Species, Wildlife Permits, Fisheries Resources Management, Migratory Bird Management, or Law Enforcement. Some, however, do not; instead, they require marshalling a wide range of Service talents to meet the requirements of implementation. For this reason, the International Affairs Staff was reestablished in the Office of the Deputy Director after being linked for several years with the Endangered Species Program.

One activity handled by the International Affairs Staff is that of implementing the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. This 1940 convention contains an environmental ethic parallel to the thinking of the time and clearly reflects the influence of Aldo Leopold.

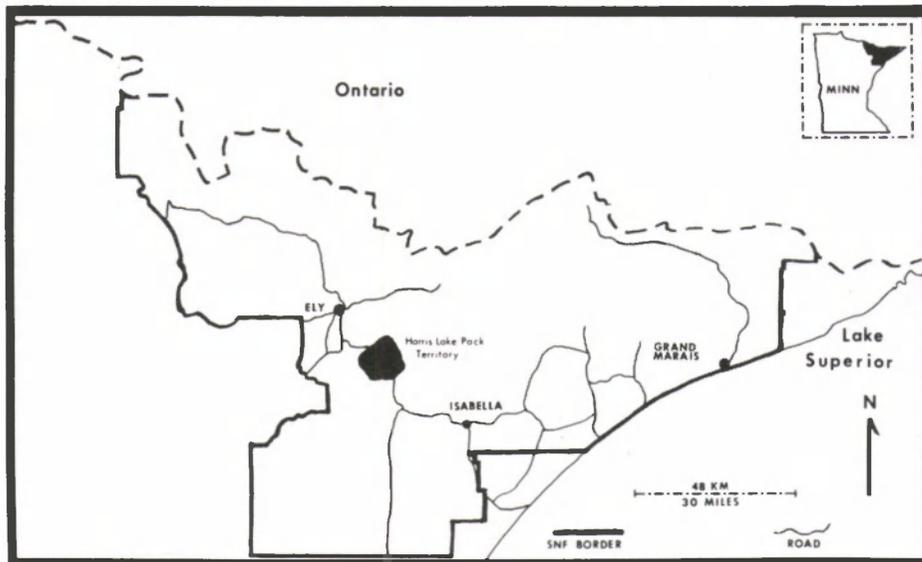
Work under the Convention involves research on a variety of wildlife, including a number of listed species. Among subjects of special concern are conservation of sea turtles, migratory species, and their habitats; management of breeding and wintering areas for North American migrants; training in both species and ecosystem management; and the goal of drawing the lengthy hemispheric flyways together in cooperative planning and management.

Another International Affairs Staff activity relates to Section 8 of the Endangered Species Act—a section of the Act which, in fact, extends far beyond the conservation of Endangered species alone. Responding to global requests, this authority taps various funding sources, including excess U.S. holdings of foreign currencies, for transferring to other countries our expertise in wildlife management, water management, censusing methods, radio tracking techniques, estimating yield, and other topics. Results from these activities are encouraging. New parks have been established in India, there is now a wildlife service in Egypt, the most important wetlands in Iberia are under protection, and new refuges in South and Central America have been established.

Transcending East-West politics, the International Affairs Staff coordinates many of the responsibilities of the Assistant Secretary for Fish and Wildlife and Parks in dealings with both the Soviet Union and the People's Republic of China. These activities have added to our knowledge of aquaculture, the wildlife of the unique Aleutian land bridge, and the disastrous effects of the introduction of exotics into these countries.

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A DECADE OF DATA FROM A SINGLE WOLF



The Superior National Forest and location of the Harris Lake Pack Territory. (Illustration reprinted from the Proceedings of the 1975 Predator Symposium, © 1977 by Montana Forest and Conservation Experiment Station, University of Montana-Missoula.)

by L. David Mech

Ever get the feeling that someone is following you? Then just think of how Wolf 2407 must feel. Fish and Wildlife Service scientists in Patuxent's Endangered Species Research Program have had this Minnesota wolf under surveillance for 10 years as of October 10, 1981. Wolf 2407—named for the number on her eartag—was originally captured and radio-collared on October 10, 1971. She was at least 1½ years old then, and the only other member of her pack at that time was her mate. The pair occupied an area of at least 30 square

miles centering around Harris Lake in the Superior National Forest, and was known as the Harris Lake Pack. The Harris Lake Pack itself has been followed since winter 1968-69 and has varied in size from 9 to 2.'

Wolf 2407 has been recaptured seven times, and so is now wearing her eighth collar. Each time she has weighed between 56 and 60 pounds. She has had at least 3 mates and has produced at least 5 litters totaling at least 13 pups.

Wolf 2407 has watched the local deer herd decline to a fraction of its former numbers, which no doubt accounts for

her relatively low average litter size. Nevertheless, she and her mate have held their territory (see accompanying map) for the entire period during which 2407 has been radioed, an area varying each year from 30 to 70 square miles.

One of 2407's offspring, male Wolf 5465, who was also radioed, dispersed from the Harris Lake Pack and formed his own adjacent to it, a pack known as the Little Gabbro Lake Pack. Although that animal was only followed for 3 years, one of his offspring, female Wolf 5935, was also radio-tagged; she dispersed from her pack, paired, and set up her own territory. This genetic line of wolves is one of only two lines that have been followed for three generations. Therefore, they are providing extremely valuable information on the degree of inbreeding in the local wolf population. Wolf 2407 has been located over 1,300 times during her life and observed almost 500 times. Her last radio is still working and potentially the animal could live a few more years. Data from her and numerous associates are providing significant information that will help not only in preserving Minnesota's wolf population but also those in many other areas.

Information available about the Harris Lake Pack from winter 1968-69 through 1974-75 is summarized in an article, "Population Trend and Winter Deer Consumption in a Minnesota Wolf Pack" by L. David Mech which was published in 1977 by the Montana Forest and Conservation Experiment Station, University of Montana in the Proceedings of the 1975 Predator Symposium.

Final Rulemaking Redefines Harm

The term "harm" under Section 9 of the Endangered Species Act of 1973 has been redefined to include only actions which actually kill or injure wildlife, including habitat modification (F.R. 11/4/81). The redefinition was proposed on the grounds that the original legislative language could be construed as prohibiting the modification of habitat, even though there was no actual injury to listed Endangered or Threatened wildlife or plants (F.R. 6/2/81).

Such an interpretation, according to Interior Department Solicitors, would go beyond the intent of Congress in the Act. Accordingly, the new definition includes habitat modification as harm only if it actually kills or injures wildlife by significantly impairing essential behavioral patterns.

The Service received numerous public comments from a variety of parties. Of the 328 comments received, 66 favored the redefinition as proposed, and 262 opposed the proposed redefinition. The bulk of criticism of the proposed redefinition was aimed at the legal memorandum attached to the proposal which discussed *Palila v. Hawaii Department of Land and Natural Resources*, 471 F. Supp. 985 (D. Haw. 1979), aff'd, 639 F. 2d 495 (9th Cir. 1981). The principal objection was that *Palila* was correctly decided and that the Service redefinition was intended to avoid the result of that case.

The Solicitor's Office, however, disagrees with the above objection, stating that the desired effect was to avoid the possible implication of the cases' con-

clusion, that Section 9 might apply to habitat modification which did not cause death or injury. For more information on this rule consult the *Federal Register* document.

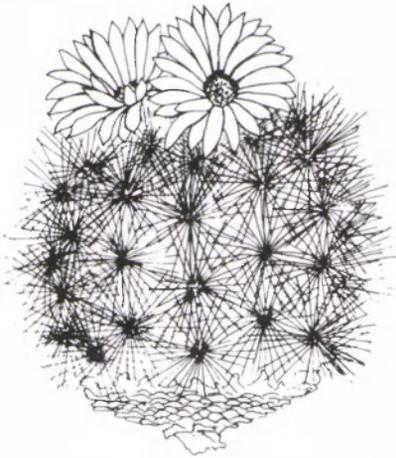
CITES List Corrections

The Service published a notice (F.R. 11/30/81) announcing corrections to the list of species included in Appendices I, II, and III of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which was published on September 4, 1981. The notice appears at 46 F.R. 58087-58088.

LACEY ACT

Continued from page 1

Lacey Act amendments are included in the Service's notice of review (F.R. 12/15/80), this notice does not insure any protection for the plants. Very few of the nearly 3,000 plants categorized in this Service document have been listed or are proposed for listing under the Endangered Species Act of 1973; it is not



The Clokey pincushion cactus (Coryphanta vivipara var. rosea) will benefit from the Lacey Act amendments. This attractive cactus is prized by both commercial and private collectors. Although it is widely distributed in Arizona, California, and Nevada, it is not abundant at any one location. It is protected by law in Arizona and Nevada, is on Appendix II of CITES, and is listed as a Category II plant on the Service's Notice of Review (F.R. 12/15/80). (Reprinted from "Threatened and Endangered Plants of Nevada—An Illustrated Manual," by Hugh N. Monzingo and Margaret Williams, May, 1980, p. 66.)

likely that many more will be proposed for listing in the near future. Therefore, it appears that the new Lacey Act amendments should be very helpful for the conservation of many plant species identified as rare in the respective States or by CITES and in need of Federal protection.

While the amendments apply to any interstate management or export of protected species, law enforcement efforts will focus on commercial dealers and suppliers. States that currently have plant laws and will, therefore, benefit from the new legislation include Arizona, California, Michigan, New Mexico, Nevada, Texas, Florida, and North Carolina.

Black Bass Act Incorporated

As well as adding plants to the Lacey Act for the first time, the new amendments combine the Lacey and Black Bass Acts into a single comprehensive statute. The combined legislation now provides more effective enforcement of State, Federal, Indian tribal, and foreign conservation laws protecting fish, wildlife, and rare plants.

The Lacey Act was one of the first Federal wildlife laws, passed in 1900 to outlaw interstate traffic in birds and other animals illegally killed in their State of origin. It was viewed then, as now, as a Federal tool to aid the States in enforcing their own conservation laws. The Lacey Act has been amended several times and its coverage expanded to include wildlife taken in violation of foreign law as well as State law.

The Black Bass Act of 1926 was based on the same philosophy as the Lacey Act. It provided Federal sanctions for the illegal interstate transportation of black bass taken, purchased, sold, or

possessed in violation of State law. Subsequently, the 1926 Act was expanded to cover all species of fish, and in 1969 was amended to encompass foreign commerce and fish taken, bought, sold, or possessed in violation of foreign law.

Penalties for Violators

Plant retailers and their suppliers who continue to deal in plants now protected by the amended Lacey Act face stiff penalties. The new legislation provides fines up to \$20,000 and prison terms up to 5 years for selling illegally acquired plants valued at over \$350. The increased penalties apply to all wildlife and plants now included under the Act's provisions. Penalties under the former Lacey Act consisted of up to \$10,000 and/or 1 year imprisonment.



The white-topped pitcher plant (Sarracenia leucophylla), which is protected by State law in Florida and Georgia, now receives Federal protection under the Lacey Act, as recently amended. This plant is known from southwestern Georgia and the Apalachicola River region of the Florida Panhandle, westward to southeastern Mississippi. The main threat to this species is habitat destruction, however, trade in this plant is also known to occur. Interest in these carnivorous plants as horticultural novelties has led to their removal from some areas where they once were common. (Reprinted from "Rare and Endangered Biota of Florida, Vol. Five—Plants," edited by Daniel B. Ward, page 108.)

RULEMAKING ACTIONS

November 1981

Service Studies Comments

The Service is conducting a study of the Endangered Species Act of 1973 as part of the government-wide regulatory review process required by Executive Order 12291. The study serves, also, as a preparation for Congressional reauthorization hearings on the Act to be held in 1982.

In response to a request for public involvement (F.R. 9/18/81), the Service received over 80 responses from State and Federal agencies, private conservation groups, business and industry representatives, universities, and indi-

vidual members of the public. The comments both question certain provisions of the Act, such as its present coverage of separate populations and subspecies of wildlife and plants as opposed to entire species, and make suggestions for new provisions which would expand the Act's coverage, such as the inclusion of plants under the Section 9 "taking provision."

Public comments are available for inspection at the Office of Endangered Species, U.S. Fish and Wildlife Service, 1000 N. Glebe Road, Arlington, Virginia.

Conference on Biological Diversity

by Michael Bender

The conferees organized into five working groups (Terrestrial Plant Species, Terrestrial Animal Species, Aquatic Species, Microbial Resources, and Ecosystem Maintenance), examining the ecological, social, and economic causes and consequences of diminishing biological diversity. After reviewing the trends of species loss worldwide, along with the quality of the existing knowledge base, technologies, and involved institutions, the groups recommended initiatives that the United States can undertake either unilaterally or in cooperation with other countries.

Each panel proposed 20 or more recommendations for action which will appear later when the conference proceedings are published. Most panels proposed the establishment of an inter-agency working group to detail how the conference recommendations might be implemented at the Federal level. Several panels recommended maintenance of a strong Endangered Species Program with full and equal protection for all listed species, regardless of their taxonomic grouping or whether they are domestic or foreign. Several Department of State speakers, notably Under Secretary James L. Buckley, vigorously supported the concept of a strong Endangered Species Act.

The proceedings of the conference, which will include the working-groups' recommendations, are expected to be available after February 1, 1982.

A Strategy Conference on Biological Diversity was held in Washington, D.C., November 16-18, as part of a continuing effort to increase the awareness of needs and opportunities in maintenance of worldwide biological diversity.

One of the main purposes of the conference was to provide policy and program guidance to the sponsoring agencies, which included: the Department of State, Department of the Interior, Department of Agriculture, Council on Environmental Quality, Smithsonian Institution, National Science Foundation, Agency for International Development, and the U.S. Man and the Biosphere Program. Other participants and observers at the conference included representatives of the Congress, universities, other countries, and scientific, conservation, and business organizations.

REGIONAL BRIEFS

Continued from page 2

regulations for manatee protection became effective on November 15, 1981.

On November 15, 1981, Chassahowitzka National Wildlife Refuge personnel completed posting the boundaries of the manatee sanctuaries at Kings Bay, Crystal River, Florida. All waterborne activities are prohibited in these areas between November 15-March 31 of each year.

Region 5—The final draft of the Maryland Darter Recovery Plan was submitted to Washington for review on November 3, 1981. This species is currently known from only one riffle area in Deer Creek, Harford County, Maryland.

On November 19, Paul Nickerson visited Martha's Vineyard, Massachusetts, to evaluate a proposed project to cross-foster eagle chicks with osprey.

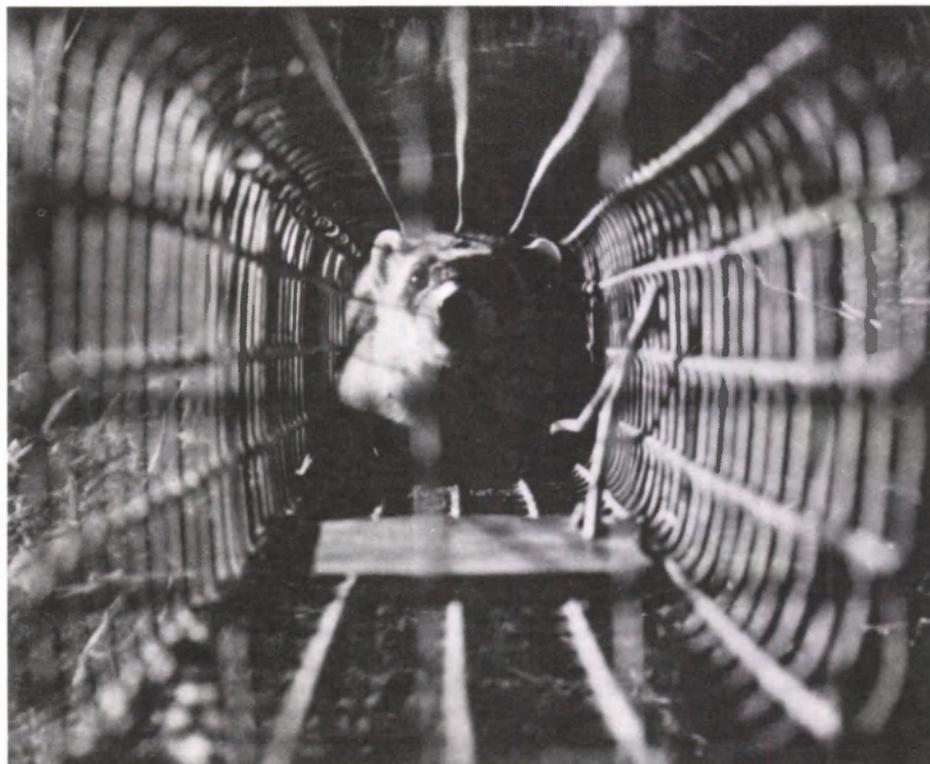
A meeting of the Eastern Peregrine Falcon Recovery Team was held November 4-6 in Asheville, North Carolina. Team Leader, Eugene McCaffrey, New York State Department of Environmental Conservation, presided. Topics discussed by the team centered around future hacking activities.

In a cooperative effort to conserve the Furbish lousewort (*Pedicularis furbishiae*), the Service and the State of Maine Critical Areas Program have recently completed the first phase of an education/landowner awareness program in the St. John River valley. The program was designed to determine

those individuals with louseworts on their land, explain the significance of the plan to them, and seek their cooperation in protecting the plant. The cooperation and support shown by the landowners have been very encouraging.

A 1981 Public Education/Stay on the Alpine Trail Program to protect the Endangered Robbins' cinquefoil (*Potentilla robbinsiana*) was successfully completed. The program was a coordinated effort between the Appalachian Mountain Club, U.S. Forest Service, U.S. Fish and Wildlife Service, and private individuals. Results of the study will soon be available.

Region 6—In early November a male black-footed ferret (*Mustela nigripes*) was trapped and radio-collared near Meeteetse, Wyoming. The ferret was continuously tracked until the transmitter quit on November 15. On November 19 the animal was retrapped through spotlighting—the collar was removed and the animal was released. Further radio-telemetry work is planned in accordance with the Black-footed Ferret Recovery Plan to obtain data on the movement, behavior, and activity patterns of the animal. Attempts to recapture the ferret will be postponed, however, until adequate telemetry equipment is prepared. The released animal and two or three additional ferrets were found after a ferret was killed by dogs on September 25, 1981 (see October 1981 issue of the BULLETIN). The ferrets are living on private land. This is the first time a behavioral study has been



One of the recently discovered ferrets—trapped and soon to be radio-collared.

Photo by U.S. Fish and Wildlife Service

conducted on a ferret in a white-tailed prairie dog (*Cynomys leucurus*) colony; very limited earlier work was done in black-tailed prairie dog (*Cynomys ludovicianus*) colonies. The black-tail's range is east of the white-tail's range, although there is some overlap.

The Colorado Native Plant Society hosted the Rocky Mountain Regional Rare Plant Conference at the Denver Botanical Gardens in Denver, Colorado, on November 5 and 6, 1981. Additional sponsors included the Denver Botanical Gardens, Utah Native Plant Society, Wyoming Native Plant Society, National Park Service, Native Plant Society of New Mexico, Association of Western Native Plant Societies, and the U.S. Fish and Wildlife Service. More than 200 participants from Federal and State agencies, universities, and industry attended.

Key topics discussed included: Why Save Rare Plants?; Rocky Mountain Overview; The Endangered Species Act; Recovery; Section 7; Federal Policies, Programs, and Regulations; State Policies, Programs and Regulations; Information Sources; Industry Policies and Programs; and Field Inventory Methods. Work groups were held on Regulations, Data Gathering, Consultation, Mitigation, Recovery, and Funding. Information about obtaining the conference proceedings will be provided when they become available.

Region 7—Endangered species biologist, Skip Ambrose, participated in the peregrine falcon trapping-banding effort sponsored by Region 2 on Padre Island, Texas this fall. The trapping effort resulted in the capture of 202 peregrines, one of which was an immature falcon banded as a nestling this summer in a Tanana River eyrie in interior Alaska. This is the eighth band encounter since the Service actively began its recent recovery program for peregrines in Alaska in 1977. A total of 462 Arctic and American peregrine falcons have been banded in Alaska since the recent recovery program began.

The future of the Aleutian Canada Goose continues to brighten. The first fall report from the wintering grounds indicated that record high numbers of Aleutians—as many as 2,700—have successfully made the migration to California. This is a 35% increase over last years highest population estimate. Of the banded geese observed thus far, 15 are birds that were among the 350+ geese released this August (as a recovery action) in the western Aleutians.

The migration route utilized by the Aleutian flock continues to be an enigma. As in the past years, no observations of Aleutian geese migrating between the breeding grounds and the coasts of California and Oregon have been reported.

BOX SCORE OF SPECIES LISTINGS

Category	ENDANGERED			THREATENED			SPECIES * TOTAL
	U.S. Only	U.S. & Foreign	Foreign Only	U.S. Only	U.S. & Foreign	Foreign Only	
Mammals	15	17	224	3	0	21	280
Birds	52	14	144	3	0	0	213
Reptiles	7	6	55	8	4	0	80
Amphibians	5	0	8	3	0	0	16
Fishes	29	4	11	12	0	0	56
Snails	3	0	1	5	0	0	9
Clams	23	0	2	0	0	0	25
Crustaceans	1	0	0	0	0	0	1
Insects	7	0	0	4	2	0	13
Plants	51	2	0	7	1	2	63
TOTAL	193	43	445	45	7	23	756

* Separate populations of a species, listed both as Endangered and Threatened, are tallied twice. Species which are thus accounted for are the gray wolf, bald eagle, American alligator, green sea turtle, and Olive ridley sea turtle.

Number of species currently proposed: 11 animals
9 plants

Number of Critical Habitats listed: 50

Number of Recovery Teams appointed: 68

Number of Recovery Plans approved: 44

Number of Cooperative Agreements signed with States:
38 fish & wildlife
11 plants

November 30, 1981

U.S. SPECIES CURRENTLY PROPOSED

Common Name	Scientific Name	When Proposed	C.H. proposed
MAMMALS			
★ Jaguar (E)	<i>Panthera onca</i>	7/25/80	no
★ Margay (E)	<i>Felis wiedii</i>	7/25/80	no
★ Ocelot (E)	<i>Felis pardalis</i>	7/25/80	no
BIRDS			
★ Albatross, short-tailed (E)	<i>Diomedea albatrus</i>	7/25/80	no
★ Parrot, thick-billed (E)	<i>Rhynchopsitta pachyrhyncha</i>	7/25/80	no
REPTILES			
Gecko, Monito (E)	<i>Sphaerodactylus micropithecus</i>	10/22/80	yes
FISH			
Chub, Borax Lake (E)	<i>Gila boraxobius</i>	10/16/80	yes
Chub, Chihuahua (E)	<i>Gila nigrescens</i>	12/15/80	yes
CRUSTACEANS			
Amphipod, Hay's Spring (E)	<i>Stygobromus hayi</i>	7/25/80	no
Isopod, Madison Cave (T)	<i>Antrolana lira</i>	10/6/80	no
Shrimp, Kentucky Cave (E)	<i>Palaemonias ganteri</i>	10/17/80	yes
PLANTS			
Akoko "Ewa Plains" (E)	<i>Euphorbia skottsbergii</i> var. <i>kalaeloana</i>	9/2/80	no
Malheur wire-lettuce (E)	<i>Stephanomeria malheurensis</i>	10/31/80	yes
Milk-vetch, heliotrope (E)	<i>Astragalus montii</i>	1/13/81	yes
Navasota Ladies'-tresses (E)	<i>Spiranthes parksii</i>	6/18/80	no
Panicgrass, Carter's (E)	<i>Panicum carteri</i>	1/30/81	yes
Pennyroyal, McKittrick (T)	<i>Hedeoma apiculatum</i>	8/15/80	yes
Phacelia (E)	<i>Phacelia formosula</i>	9/2/80	no
Pogonia, small whorled (E)	<i>Isotria medeoloides</i>	9/11/80	no
Silverling (T)	<i>Paronychia argyrocoma</i> var. <i>albimontana</i>	10/27/80	no

E = Proposed as Endangered

T = Proposed as Threatened

★ = Foreign populations listed as Endangered

FOREIGN CONSERVATION

Continued from page 3

Such bilateral activities will be reviewed in future BULLETIN articles.

There is also a growing awareness within the private sector of the global interdependence of human, wildlife, agricultural, energy, and mineral resources. For example, the International Crane Foundation, National Audubon Society, National Wildlife Federation, Holy Land Conservation Fund, and World Wildlife Fund-US have all taken steps to strengthen their international interests, and the International Affairs Staff has formed working partnerships with each of these groups.

International demand for U.S. assistance in conservation continues to mount. In recent weeks, I have received a minister from West Africa seeking to prevent U.S. timber interests from destroying the last havens of wildlife in his country, and Europeans anxious to share their knowledge and experiences with acid precipitation. I have met with Latin American counterparts to our Service who lamented our near total lack of knowledge regarding their countries and what they are doing to protect migratory species shared with North America. I have heard the urgent appeal of a U.S. Ambassador in Central Africa asking the Service to help rescue one of the last viable populations of the Endangered black rhino in the wild—a mission which, if it is to be successful, must be accomplished within 3 years.

So, although the focus of Service activities seems predominantly domestic, as long as wildlife migrates, pesticides spread, winds and waters move, and the interdependence of the natural system remains, there will be an international mission for us. And, as long as we have the expertise to conserve America's genetic diversity, there will be a global demand for it.

Attention Readers

If you are receiving a duplicate copy of the BULLETIN, or if your office continues to receive copies addressed to individuals no longer employed by your agency, please let us know so that we can eliminate these entries from our mailing list. Please refer to the zip code as well as to the addressee when you call or write regarding changes in the mailing list. Thank you.

—The Editor

NEW PUBLICATIONS

Wildlife Monograph No. 80 (Supplement to *The Journal of Wildlife Management*, Vol. 45, No. 4, October 1981), "Dynamics, Movements, and Feeding Ecology of a Newly Protected Wolf Population in Northwestern Minnesota," by Steven H. Fritts and L. David Mech was published by the Wildlife Society. Copies are available for \$3.00 from the Wildlife Society, 5410 Grosvenor Lane, Bethesda, Maryland 20814.

"Endangered Means There's Still Time," an illustrated (black and white) booklet which explains the Endangered Species Program, is now available for \$2.50 from the Superintendent of Documents, U.S. Government Printing Office Washington, D.C. 20402 (Stock # 024-010-005-26-2). Single complimentary review copies may be requested by writing the Publications Unit, U.S. Fish and Wildlife Service, 18th and C Streets, N.W., Washington, D.C. 20240.

"Endangered Marine Turtles of the Gulf Coast" is now available from the Albuquerque, New Mexico, Office of Endangered Species.

A special report entitled "Plants Protected by the Convention on Interna-

tional Trade in Endangered Species of Fauna and Flora: A List of Plants Reported in Trade, Including Common Names and Synonyms," prepared by the International Convention Advisory Commission (ICAC) is now available. Copies may be requested by writing Mr. Thomas McIntyre, International Convention Advisory Commission, Chairman, Room 713, FB-1, 6505 Belcrest Road, Hyattsville, Maryland 20782.

The Proceedings of the Symposium of the 1980 Desert Tortoise Council are now available for \$8.00 per copy. Countries other than the U.S., Canada, or Mexico add \$1.00 per copy for postage and handling for surface mail, or \$3.00 per copy for airmail. (U.S. drafts only, please.) Make check or money order payable to the Desert Tortoise Council and mail to 5319 Cerritos Avenue, Long Beach, California 90805.

Xerces Slide Collection

A set of 83 color transparencies of endangered arthropods is now available from the Xerces Society. A listing—with code numbers—of the available slides (sold for \$.60 each, plus postage) can be requested by writing Larry Orsak, Department of Entomology, University of California, Berkeley, California 94720. Essential information on the transparency subject appears on each slide. In addition, each slide ordered will be accompanied by an information sheet on the transparency subject. Presently, the Xerces slide collection includes six Endangered butterflies, one Threatened beetle and one Threatened moth, four extinct butterflies, and an array of other rare butterflies.

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