



ENDANGERED SPECIES TECHNICAL BULLETIN

Department of the Interior • U.S. Fish and Wildlife Service • Endangered Species Program, Washington, D.C. 20240

Lambertson To Head Endangered Species Program



U.S. Fish & Wildlife Service Photo

Ronald E. Lambertson

Ronald E. Lambertson, an Interior Department lawyer serving as the Assistant Solicitor for Fish and Wildlife, has been named by Fish and Wildlife Service Director Greenwalt as the agency's Associate Director for Federal Assistance.

In this position, Lambertson, 38, succeeds Keith M. Schreiner as Endangered Species Program Manager and administrator of the Service's multimillion dollar Federal grant program with the States. (Schreiner is now Area Director for Alaska.)

"With his scientific and legal training, Ron Lambertson is uniquely qualified to guide one of the Service's most sensitive programs," Greenwalt said. "His extensive involvement with endangered species matters makes him a definite asset to the agency, and an effective voice for the resources it serves."

As Associate Director, Lambertson will oversee administration of the Endangered Species Act of 1973, under which our Service is responsible for listing, recovery planning, protection of Critical Habitat, enforcement, land acquisition for listed species, cooperative agreements with the States, and consultation with other Federal agencies on projects that could affect protected species. He will also direct this country's implementation of a 54-nation treaty, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and will oversee the issuance of permits for activities with species listed under both the Act and CITES. Additionally, he will administer the \$110 million Federal aid program for State fish and

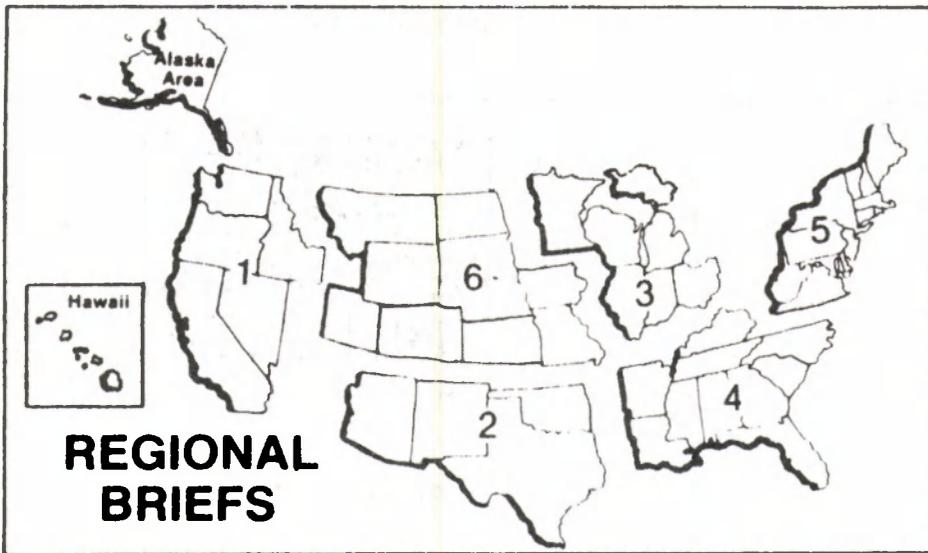
wildlife restoration and enhancement activities.

Receiving his juris doctor from the University of Colorado in 1970 and holding an undergraduate degree in wildlife biology from Colorado State University, Lambertson came to the Interior Department in 1970. He became one of the youngest attorneys ever appointed to the position of Assistant Solicitor in 1974, where he has since served as the Fish and Wildlife Service's chief legal advisor in all aspects of the agency's management programs, particularly endangered species. He helped prepare Interior's legal brief for the Supreme Court in the TVA Tellico Dam case, and has participated on several Service consultation teams. Earlier, he had assisted in the formulation of interagency consultation procedures that were adopted as Section 7 regulations (pre-1978 Amendments), and helped develop Service policy for administering the cooperative agreement program.

In recognition of his "professional adherence to the prospect of a sound environment, his interdisciplinary methodology, and his personal interest in the changing role of the Federal Government," Lambertson received Interior's Meritorious Service Award in 1976.

A native of Adams County Colorado, Lambertson now lives in Silver Spring, Maryland with his wife, Bonnie, and their two daughters.

Deputy Associate Director Harold J. O'Connor had been acting Associate Director-Federal Assistance—with C. Phillip Agee serving as his deputy—since Schreiner's departure last March.



REGIONAL BRIEFS

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

Region 1. The first meeting of the newly formed Bald Eagle Recovery Team (Pacific) was held November 8. Five western States and three Federal

agencies were represented.

State and Federal agency comments on the updated California Condor Recovery Plan are being received and evaluated preparatory to submitting the final draft plan to Washington for approval.

A record high 1,700 Aleutian Canada

U.S. Fish and Wildlife Service Washington, D.C. 20240

Lynn A. Greenwalt, *Director*
(202-343-4717)

Ronald E. Lambertson
*Associate Director and
Endangered Species Program Manager*
(202-343-4646)

Harold J. O'Connor
Deputy Associate Director
(202-343-4646)

John Spinks, *Chief,
Office of Endangered Species*
(703/235-2771)

Richard Parsons, *Chief,
Federal Wildlife Permit Office*
(703/235-1937)

Clark R. Bavin, *Chief,
Division of Law Enforcement*
(202-343-9242)

TECHNICAL BULLETIN STAFF
Dona Finnley, *Editor*
Morey Norkin, *Editorial Asst.*
(703/235-2407)

Regional Offices

Region 1, Suite 1692, Lloyd 500 Bldg., 500 N.E. Multnomah St., Portland, OR 97232 (503-231-6118): R. Kahler Martinson, *Regional Director*; Edward B. Chamberlain, *Assistant Regional Director*; David B. Marshall, *Endangered Species Specialist*.

Region 2, P.O. Box 1306, Albuquerque, NM 87103 (505-766-2321): W. O. Nelson, *Regional Director*; Robert F. Stephens, *Assistant Regional Director*; Jack B. Woody, *Endangered Species Specialist*.

Region 3, Federal Bldg., Fort Snelling, Twin Cities, MN 55111 (612-725-3500); Harvey Nelson, *Regional Director*; Daniel H. Bumgarner, *Assistant Regional Director*; James M. Engel, *Endangered Species Specialist*.

Region 4, Richard B. Russell Federal Bldg., 75 Spring St., S.W., Atlanta, GA 30303 (404-221-3583); Kenneth E. Black, *Regional Director*; Harold W. Benson, *Assistant Regional Director*; Alex B. Montgomery, *Endangered Species Specialist*.

Region 5, Suite 700, One Gateway Center, Newton Corner, MA 02158 (617-965-5100); Howard Larsen, *Regional Director*; Gordon T. Nightingale, *Assistant Regional Director*; Paul Nickerson, *Endangered Species Specialist*.

Region 6, P.O. Box 25486, Denver Federal Center, Denver, CO 80225 (303-234-2209); Don W. Minnich, *Regional Director*; Charles E. Lane, *Assistant Regional Director*; Don Rodgers, *Endangered Species Specialist*.

Alaska Area, 1101 E Tudor Rd., Anchorage, AK 99503 (907-276-3800, ext. 495): Keith M. Schreiner, *Area Director*; Jon Nelson, *Ass't Area Director*; Dan Benfield, *Endangered Species Specialist*.

U.S. Fish and Wildlife Service 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, Michigan, Minnesota, 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, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming. **Alaska Area:** Alaska.

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geese (*Branta canadensis leucopareia*) were observed in Colusa County, California, during November.

Purchase options were signed on two tracts totalling 480 acres of Critical Habitat for the Endangered blunt-nosed leopard lizard (*Crotaphytus silus*) and San Joaquin kit fox (*Vulpes macrotis mutica*) in California's San Joaquin Valley. Negotiation of the options will provide interim protection to this area until acquisition can be accomplished.

Region 2. The land acquisition process has been initiated for Clear Creek, Texas. Acquisition of this area will aid the protection of the Clear Creek gambusia (*Gambusia heterochir*).

All animals in the Mexican wolf (*Canis lupus*) captive breeding program in Tuscon, Arizona, were examined and the males tattooed for identification. Red wolves (*Canis rufus*) at the Point Defiance Zoo in Tacoma, Washington, were paired for the 1980 breeding season. The red wolf status summary has had its final review and will be published as an Endangered Species Report.

Region 3. The regional office hosted a mussel identification workshop attended by approximately 45 people representing five agencies. During the session an identification poster (a joint effort by the Service and the Army Corps of Engineers) for the 48 species of Mississippi River mussels was reviewed and sent back to the contractor for final preparation.

Endangered Species personnel attended a Bald Eagle Recovery Team (Northern States) meeting held in conjunction with the Raptor Research Foundation symposium. They also met with representatives from the Sierra Club and HOWL (Help Our Wolves Live) to discuss a proposed school curriculum on the wolf.

Region 4. The Tennessee Valley Authority, in cooperation with the Service, recently placed gates on three gray bat (*Myotis grisescens*) maternity caves—two in Tennessee and one in Alabama. Human disturbance has reduced the colonies in these caves to a fraction of their former numbers.

On Thursday, November 29, the gates of Tellico Dam were closed and the reservoir began covering the area designated as Critical Habitat for the snail darter (*Percina tanasi*).

Region 5. Plans for next year's Furbish lousewort (*Pedicularis furbishiae*) investigations in northern Maine are near completion. The studies will be funded by the Army Corps of Engineers as part of the Dickey-Lincoln School Lakes power project.

Region 6. A cave-in at Pilot Knob Mine in Missouri last spring has left doubts about the site's suitability as a

hibernaculum for the Endangered Indiana bat (*Myotis sodalis*). Engineers have recommended that the mine, Critical Habitat and formerly hibernaculum for about 30 percent of the species' population, be left undisturbed in hopes that the area will stabilize and once again serve the Indiana bat.

The Greenback Cutthroat Trout Recovery Team met to begin revising the recovery plan.

Meetings were held at Laramie, Wyoming; Provo, Utah; and Huron, South Dakota to identify plant taxa that should be considered for listing. The meetings were attended by Federal, State, and University personnel.

FIRST PLANT RECOVERY PLAN

The Fish and Wildlife Service has awarded a \$5,000 contract to the Wisconsin Department of Natural Resources to prepare a recovery plan for northern wild monkshood (*Aconitum noveboracense*), the first listed plant to be named as the sole subject of a service recovery plan.

State investigators will inspect and classify habitat, identify threats to the species, and interview landowners, scientists, and State endangered species officials. A completed plan is expected by October 1, 1980.

The northern wild monkshood occurs on a few cliff habitats in and about the unglaciated portion of southeastern Wisconsin and northeastern Iowa. Disjunct populations occur in Ohio and New York.

A member of the buttercup family, this monkshood displays violet flowers from June through September. Little is known about the properties and ecology of this rare species, but the majority of its remaining habitats are in Wisconsin.

CORRECTION

Three names were inadvertently excluded from the announcement of the formation of the Pacific Coast Bald Eagle Recovery Team in the November 1979 BULLETIN. The names are: Barbara Holder, U.S. Forest Service; Karen Steenhof, Bureau of Land Management; and Bob Anthony, Cooperative Wildlife Research Unit, Oregon State University.

CONGRESSIONAL ADD-ON TO KEEP GRANT-IN-AID PROGRAM AFLOAT

More than 30 States will be able to get on with the business of endangered species conservation this year with a little help from Congress and President Carter, who on November 27 approved an additional \$2 million to boost the Endangered Species Grant-in-Aid Program with the States through Fiscal 1980.

As of December 6, 1979, 33 States had entered into cooperative agreements with our Service, entitling them to at least 66-2/3 matching fund assistance for surveys, research, enforcement, and other activities benefiting their rarest resident species. Many of these States joined the grant-in-aid program only recently, following the relaxation of eligibility requirements for the program (along with the December 19, 1977, reauthorization of appropriations under Section 6 of the Endangered Species Act) and the provision for cooperative agreements to protect plants (accompanying the November 10, 1978, amendments to the Act)—see January 1978 and October 1978 BULLETINS.

Eleven States have entered the grant program this year under recently finalized Service regulations permitting their participation even when they are not empowered to manage all listed species resident in the State (see June 1979 BULLETIN).

[The 1973 Act essentially required States to have adequate authority in areas such as law enforcement, research, and habitat acquisition, as well as active programs for the conservation of their resident, *federally-listed* Endangered and Threatened wildlife to qualify for the agreements. As mandated under both the 1977 and 1978 amendments, however, Service regulations now provide for matching fund assistance to any State meeting certain criteria and having plans "under which immediate attention will be given to those resident species of fish and wildlife or plants which are determined by the Secretary and the State agency to be endangered or threatened and which the Secretary and the State agency agree are most in need of conservation programs . . . (emphasis added)."]

Several new agreements have also been signed for plant conservation—two (California and Washington) supplementing existing wildlife agreements, and another (Connecticut) exclusively for plants.

Program History and Accomplishments

In fashioning the Endangered Spe-

cies Act, Congress incorporated cooperative agreement provisions to allow qualifying States to retain and strengthen their traditional wildlife management roles. This was done out of recognition that the States want to assist in the restoration of their own endangered species and are in many cases more familiar with the conservation needs and biological status of their resident wildlife and plants—and those species that may be headed for trouble—than the Federal Government.

The Endangered Species Grant-in-Aid Program was put in motion only in 1976, when 16 States signed up for Federal matching fund assistance. While at that time a few States had developed active endangered species programs, most were newcomers to the concept of endangered species protection and recovery planning.

Today, most of the States and territories are active in researching, protecting, managing, and publicizing the plight of their endangered wildlife and plants, with much of their data gathering and other research being carried out by specialists at colleges and universities. Among the most significant achievements has been the protection of vital endangered species habitat through State land acquisition. (Seventeen essential areas in five States have been purchased or are now planned for acquisition to benefit 11 protected species.) Under the grant program, most States have undertaken substantial recovery programs for federally listed and/or resident species, many of which have been featured in previous BULLETINS. While space will not permit us to summarize State activities, here is a sampling of accomplishments at the close of FY 1979:

- Florida panther (*Felis concolor coryi*)—one population is now known in Collier County, Florida; there are 547 confirmed records, with cats travelling as much as 100 miles from home territory.

- Indiana bat (*Myotis sodalis*)—Bats were located and counted during the winter in four caves in Missouri, three in Arkansas, and one in New York. Some caves have been protected by gating.

- Ozark big-eared bat (*Plecotus townsendii ingens*)—once thought to be almost extinct, 180 have been found in two Arkansas caves.

- Bald eagle (*Haliaeetus leucocephalus*)—In 1978, 440 active nests were located in five States (Maine, Florida, Maryland, California, and Michigan),

Continued on page 4

Congressional Add-on

Continued from page 3

223 of which produced 335 young eagles; 8 captive-reared birds were introduced to the wild; winter counts were completed in Maine, New York, and Colorado; many of the nest sites and winter roosts are protected.

- Peregrine falcon (*Falco peregrinus anatum*)—23 active nests have been located and protected; reproduction was augmented at 6 nests result-

ing in 16 fledglings; 25 captive-reared birds were introduced to the wild through hacking programs; 114 potential eyries were located.

- American crocodile (*Crocodylus acutus*)—Five nests were found on Key Largo, Florida and 20 animals sighted.

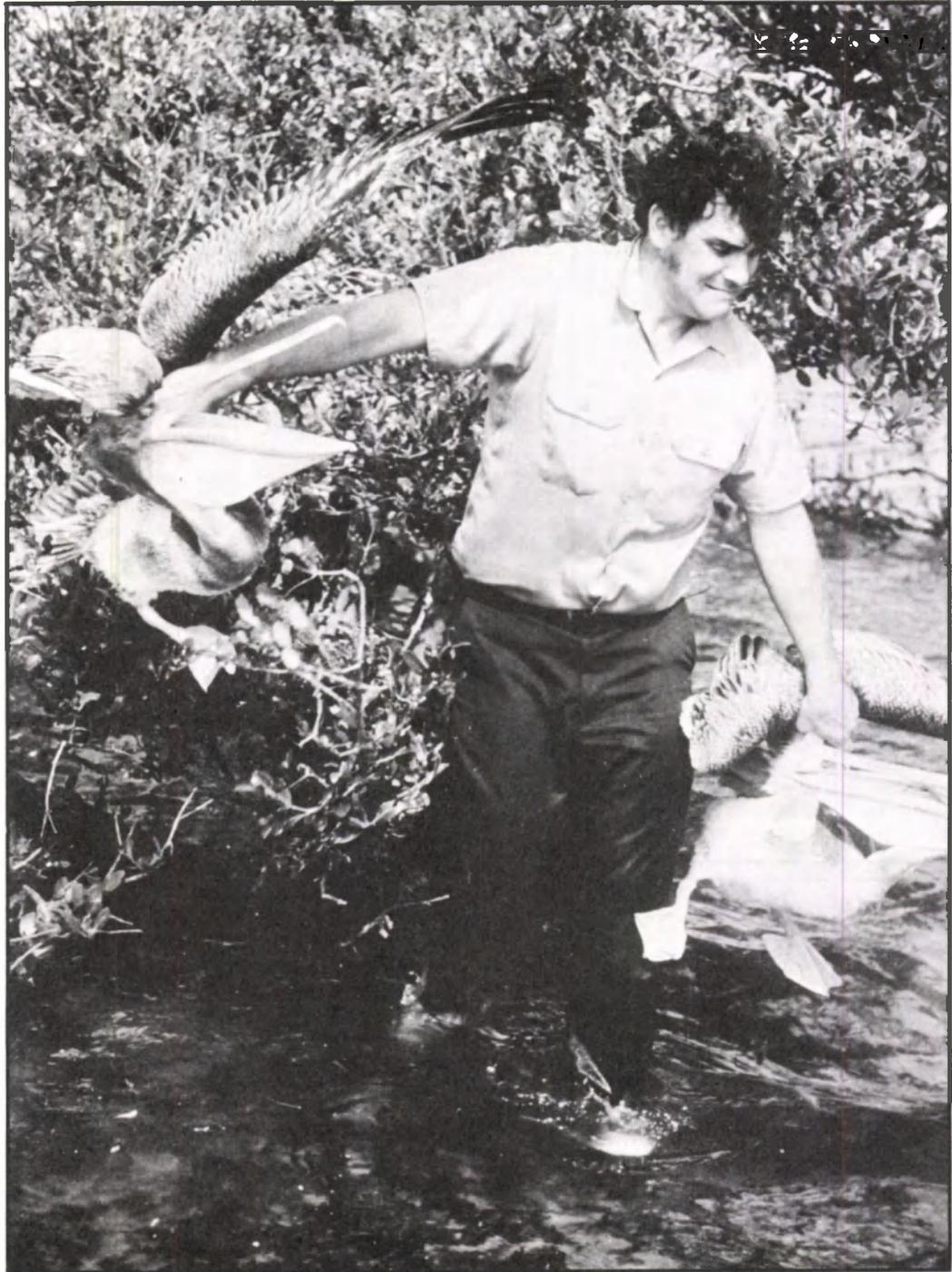
- Owens River pupfish (*Cyprinodom radiosus*)—This species has been found in only three California springs in which habitats are fully utilized; two additional areas are considered suitable for transplants.

- Unarmored threespine stickleback (*Gasterosteus aculeatus willamsonii*)—Three new populations have been located in California; 100 specimens were transplanted to new habitat; predatory African clawed frogs (*Xenopus laevis*) are being eliminated.

Funding and Future Needs

Initially, only a handful of States qualified for (or were interested in) matching fund assistance, so only a fraction of available Federal aid funds were used. But in the last couple of

Under a cooperative agreement with the Service, Florida ships about 100 brown pelicans annually to Louisiana in an attempt to restore the species to this portion of its former range. The states are cooperatively monitoring the bird's progress and limiting factors on the newly established colonies in Louisiana.



Florida Game & Fresh Water Fish Commission Photo

years, as States have further developed their conservation capabilities and their programs have grown, available funds have barely met State needs.

Since fiscal 1976, some \$16 million has been allocated to 22 States for work on over 128 resident endangered species. Allocations of \$1.6 million in grant-in-aid were made in fiscal 1977 to 16 States. But in fiscal 1978, \$5.7 million was apportioned to 22 eligible States—representing a \$4 million appropriation and \$1.7 million of available carryover funds that had accumulated early in the program. In fiscal 1979, only \$3 million was appropriated, but \$5.8 million was allocated to 22 States. (This allocation exhausted the remaining carry-over funds.)

To maintain State cooperative projects at "1979" levels in fiscal 1980, more than \$5 million was needed. The additional \$2 million added by Congress to the Service's \$3 million budget request will help keep ongoing programs up to speed (although many States will have to confine spending to

high priority efforts), and should provide minimum support to new participants (no more than \$30,000 each) to get their programs going.

A number of States (as well as Puerto Rico, Guam, and the Virgin Islands) are expected to sign cooperative agreements this year, putting additional stresses on the Service budget. As many as 46 States may be eligible for and anticipating grant-in-aid assistance by FY 1981.

As provided under the 1977 reauthorization for Section 6, appropriations for grant-in-aid for FY 1981 will be limited to \$4 million*, unless Congress opts this year to authorize and appropriate a bonus amount to keep State programs on their feet. A renewed appropriations authorization would also be necessary to apportion Section 6 matching funds after September 30, 1981.

* P.L. 95-212 authorized the appropriation of up to \$16 million for FY 1978 through FY 1981, of which \$12 million has been appropriated to date.

Plant correction

Within the November 1979 feature on plant listings, our page 6 description of the Knowlton cactus (*Pediocactus knowltonii*) should have indicated its distribution only in one general location in northwestern rather than northeastern New Mexico. . .

New Publications

The Wild Canid Survival and Research Center is making available the proceedings of *Wildlife Survival: The Second Symposium on Endangered North American Wildlife and Habitat* held in St. Louis in 1977. Papers and panel discussions cover habitat, translocation and reintroduction, preservation in captivity, scientific assessment, education, media, corporate involvement, legislation and legal action, and activism. Copies are available for \$6.85. Write to Bill Malloy, Wolf Sanctuary, P.O. Box 20528, St. Louis, Missouri 63139.

Copies of the pamphlet, *Endangered and Nongame Species Program in New Jersey* are available, in limited quantities, from the New Jersey Division of Fish, Game, and Wildlife, Box 1809, Trenton, New Jersey 08625. A \$1.00 donation would be appreciated.

Administration of the Marine Mammal Protection Act of 1972, a Fish and Wildlife annual report to Congress, contains status reports on the polar bear, dugong, marine and sea otters, Atlantic and Pacific walrus, and three species of manatee covering the period from April 1, 1978, to March 31, 1979. The Fish and Wildlife Service and the Commerce Department's National Marine Fisheries Service share jurisdiction for protection of marine mammals, with our service responsible for the nine species in the report.

Single copies may be obtained by writing the Director (OWA), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240.

COOPERATIVE AGREEMENT PROGRAMS

State	Total Allocation*	Type	
		Animal	Plant
Alaska		X	
Arkansas	\$ 260,700	X	
California	\$4,279,000	X	X
Colorado	\$2,815,100	X	
Connecticut		X	X
Delaware	\$ 40,300	X	
Florida	\$ 815,100	X	
Georgia	\$ 671,800	X	
Idaho		X	
Illinois		X	
Iowa		X	
Kansas		X	
Maine	\$ 20,000	X	
Maryland	\$ 552,500	X	
Massachusetts		X	
Michigan	\$ 960,000	X	
Missouri	\$ 316,600	X	
Montana		X	
Nebraska	\$ 75,300	X	
Nevada		X	
New Hampshire		X	
New Jersey	\$ 845,200	X	
New Mexico	\$ 64,300	X	
New York	\$1,161,100	X	
North Carolina	\$ 762,000	X	
Pennsylvania	\$ 417,400	X	
South Carolina	\$ 410,500	X	
South Dakota	\$ 165,700	X	
Tennessee	\$ 422,600	X	
Utah		X	
Virginia	\$ 163,800	X	
Washington	\$ 390,700	X	X
Wisconsin	\$ 358,900	X	

* Matching funds allocated from inception of program through 12/6/79.



U.S. Fish and Wildlife Service

RESTORATION OF DELMARVA FOX SQUIRREL PLANNED

A plan to restore the Delmarva Peninsula fox squirrel (*Sciurus niger cinereus*) throughout its historic range has been approved by the Fish and Wildlife Service. According to the recovery plan, maintenance of the present range along with the addition of 10 new colonies of fox squirrels outside that range could allow the species to be downgraded from Endangered to Threatened status. The addition of 20 colonies (in addition to the previously mentioned 10) would result in a complete delisting.

Currently, the Delmarva fox squirrel is known in only four Eastern Shore counties of Maryland and one location in Accomac County, Virginia. Though never as abundant as the gray squirrel (*Sciurus carolinensis*), the Delmarva fox squirrel was formerly found in southeastern Pennsylvania, Delaware, New Jersey, and probably the Virginia portion of the Delmarva Peninsula. Changing habitat brought about the decline in this subspecies' distribution.

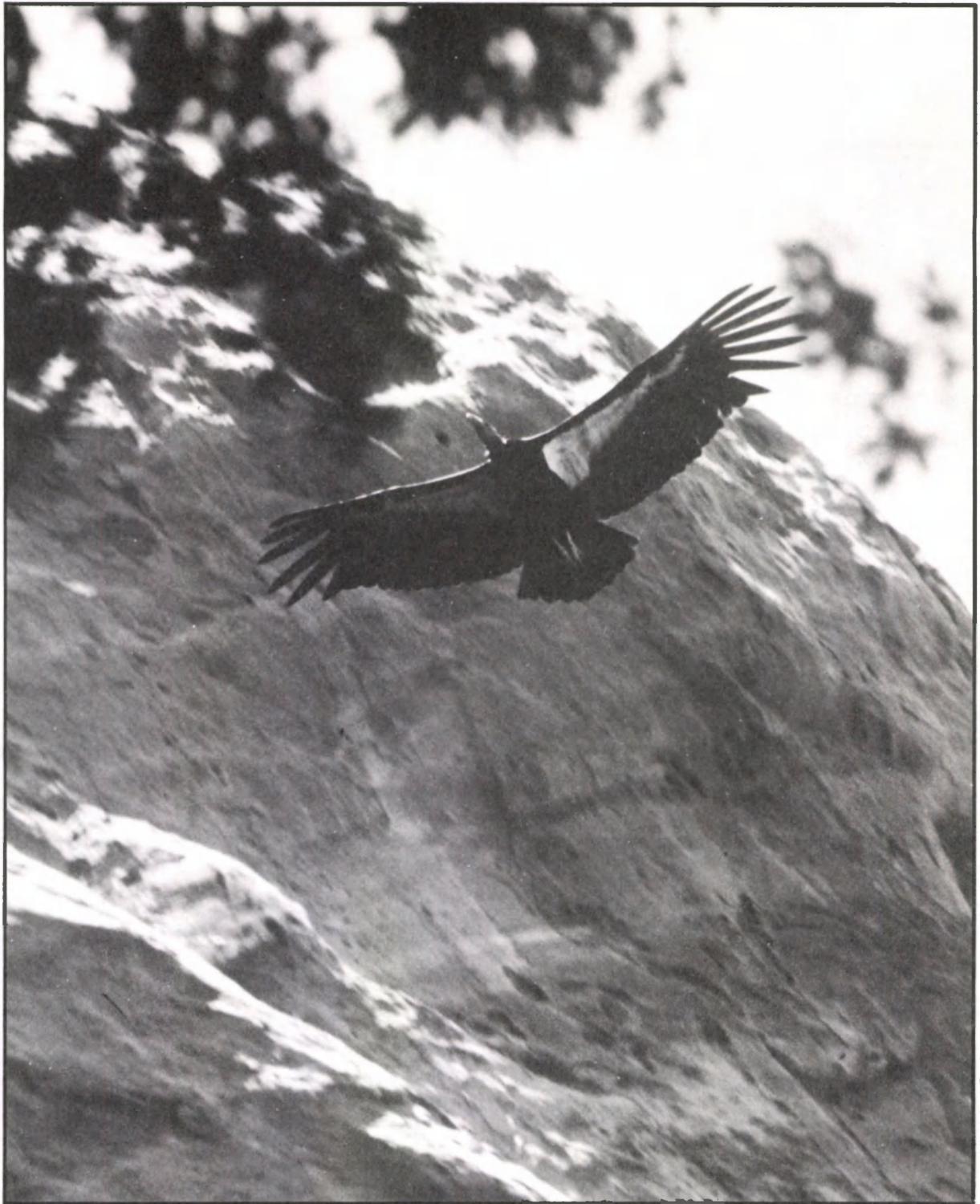
The Delmarva fox squirrel is found mostly in mixed stands of hardwoods, often with loblolly pines, and is restricted generally to groves of trees along streams and bays and in small woodlots. Delmarva fox squirrels almost always occur with the gray squirrel. Because of the preponderance of loblolly pines in the squirrel's present range, and the fact that loblolly pine seeds are eaten by Delmarva fox squirrels, many people assume they are a necessary part of fox squirrel habitat. However, much of the former range of this subspecies was north of the present distribution of loblolly pines.

Delmarva fox squirrels may weigh as much as two pounds or more, making them subject to prey only from the largest raptors, foxes, and dogs. Some are killed by hunters who mistake them for grays. These shootings are thought to have a negligible effect on the population numbers.

The recovery plan calls for a coop-

erative program with our Service, and the States of Maryland, Virginia, Pennsylvania, and Delaware using basic management practices to 1) protect existing habitat by planned forest cutting and prevention of excessive understory development, 2) assure adequate dens by protection of den trees or placement of nesting boxes, 3) reduce competition from gray squirrels and other animals, 4) protect the Delmarva fox squirrel from hunting, poaching, and predation, and 5) provide an adequate and dependable food supply.

Delmarva fox squirrels respond positively to management. They are not disturbed by human activities any more than gray squirrels, provided their habitat is left intact. Fox squirrels are often the squirrels of cities and towns, or parks and cemeteries in the Midwest. They can be disturbed in their nests and handled with few ill affects. Females move the young to another nest if disturbed, but will not abandon them.



National Audubon Society

CONDOR PROGRAM FUNDED

The long-term program to restore the critically Endangered California condor (*Gymnogyps californianus*)—one of the most expensive efforts ever under-

taken for a listed species—will soon be underway with funds specially approved by Congress.

In signing P.L. 96-126, President Carter authorized a \$500,000 appropriation making possible full-scale research, captive propagation, and habitat protection for the condor involving Federal, State, and private agencies (see our *Special Report*—May 1979 BULLETIN).

Interior Secretary Andrus and Russell Peterson, president of the National Audubon Society, were joined by officials of the California Department of Fish and Game, the Bureau of Land Management, and our Service on December 17 in a ceremony initiating the multiagency cooperative rescue program. (The signing ceremony will be featured in the January 1980 BULLETIN.)

Rulemaking Actions

November 1979

COMMENT PERIOD REOPENED ON RED-BELLIED TURTLE CRITICAL HABITAT

The Service has reopened the comment period and will hold an additional public meeting and hearing on the reproposal of Critical Habitat for the Plymouth red-bellied turtle (*Chrysemys rubriventris bangsi*). The comment period will be reopened, and comments accepted, between January 10 and February 15, 1980. The public meeting will be held on January 15, 1980, and

the hearing on January 29, 1980, (both from 7:00 to 9:00 pm) in the Myles Standish Room, second floor of the Plymouth Memorial Hall, 83 Court Street, Plymouth, Massachusetts.

This action is being taken subsequent to a public request (in response to the September 29, 1979, reproposal) for an additional meeting and hearing during evening hours.

RED LECHWE PROPOSED FOR RECLASSIFICATION

Following a review of the status of the red lechwe (*Kobus leche*)—an African antelope now listed as Endangered—the Service has determined that its reclassification to Threatened status may be warranted (F.R. 11/27/79).

Safari Club International petitioned the Service to remove both the red lechwe and the argali (*Ovis ammon hodgsoni*) from protection under the Endangered Species Act of 1973. The Service subsequently published a notice of review (F.R. 4/19/78) seeking additional information on the status of these two species as well as the Bontebok antelope (*Damaliscus dorcas dorcas*) and 62 other listed species.

Three separate subspecies of red lechwe—the red lechwe proper (*K.l. lechwe*), the black lechwe (*K.l. smithemani*), and the Kafue lechwe (*K.l. kafuensis*)—occur in parts of Namibia, Botswana, Angola, Zambia and southern Zaire. All have declined in numbers since early in this century. The nominate race has always had the most extensive distribution, and is now generally common and widespread. (Red lechwe populations are believed stable, with their numbers now estimated at 150,000.)

Lechwes live along the fringes of swamps or rivers, or on inundated flood plains, spending much of their day in shallow water. Much of the once extensive habitat of the lechwe has been destroyed by inundation from the construction of dams and reservoirs, or has been damaged by prolonged drought or the disappearance of streams due to adverse land use practices.

Although the Service believes that the lechwe may not now be Endangered, it is felt that the species does qualify

FIVE FOREIGN REPTILES PROPOSED AS ENDANGERED

Two snakes and three lizards subjected to habitat destruction, competition, overcollection, and malicious killing on the foreign islands where they occur have been proposed by the Service for Endangered classification (F.R. 11/2/79).

The two boas (*Bolyeria multica rinata* and *Casarea dussumieri*) occur only on Round Island near Mauritius, where they are the sole surviving members of the subfamily Bolyerinae, a group of primitive boas. There have been only six sightings of *B. multica rinata* since 1935, the last in 1975. The total population of *C. dussumieri* is thought to number 75 animals. Severe erosion has occurred on the island following the destruction of vegetation by introduced rabbits and goats, and the resulting deterioration of the palm forest is considered the main factor in the decline of these snakes. (Both are now protected under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.)

The San Esteban Island chuckwalla (*Sauromalus varius*) occurs only on the 43 square kilometer San Esteban Island in the Gulf of California, where it

is confined mainly to a single arroyo. Overcollection for the commercial pet trade has been the primary threat to this large iguanid lizard, which is also vulnerable to increasing habitat destruction within its limited range. (The chuckwalla was the subject of a March 6, 1979, notice of review following receipt of a petition for listing from Dr. Ted Case—see March 1979 BULLETIN.)

The Fiji Island banded iguana (*Brachylophus fasciatus*) and Fiji iguana (*Brachyiophus* sp.) are found only in the Pacific—the banded iguana on several islands in Fiji and Tonga and the recently discovered (but as yet undescribed) Fiji iguana only on a remote Fiji island. Deforestation and grazing by introduced goats are threatening the habitat of these species. With their attractive coloration and limited range, the threat of commercial exploitation is especially serious. Taking by native islanders and predation by cats have also contributed to their decline.

Comments on the Service proposal should be received by the Director (OES), U.S. Fish and Wildlife Service, no later than January 31, 1980.

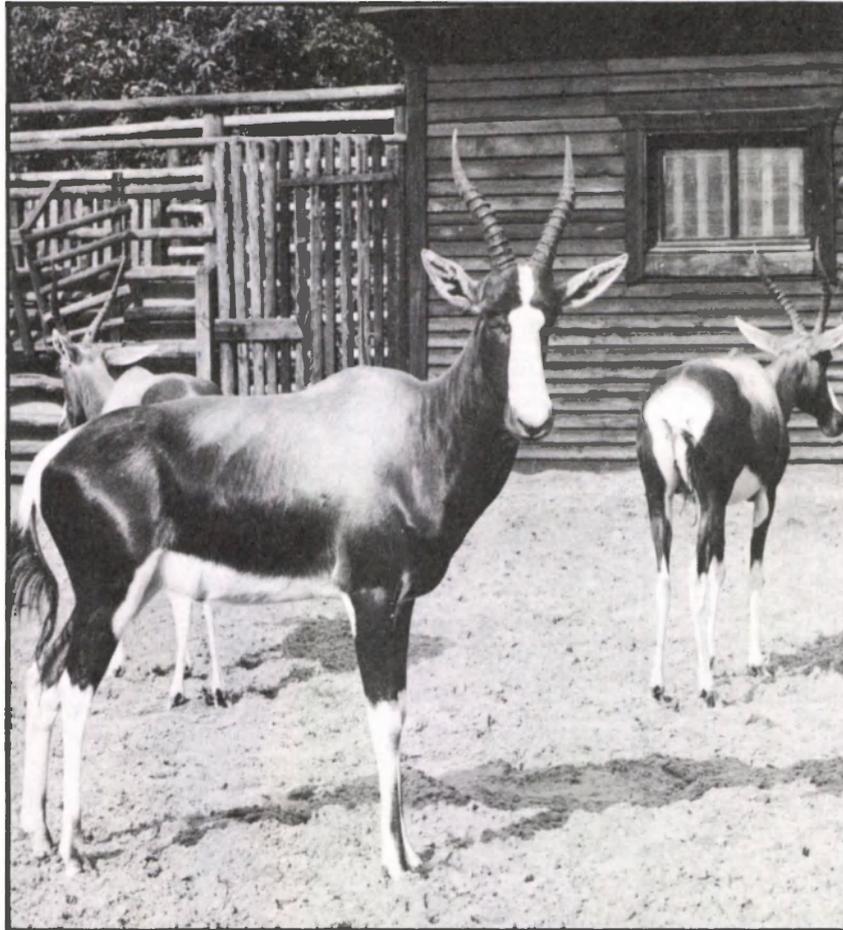
for threatened status. There are still thousands of square miles of wetland habitat remaining, but the continuing development of the African nations over the next decade will undoubtedly result in the loss of much that remains, constituting a threat to the species. (Subsistence hunting has also been a major factor in the general decline of the species.)

Due to its recently improved status, the lechwe was recently transferred from the more restrictive Appendix I to Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), lifting some restrictions on trade in the species.

With regard to the argali and Bontebok antelope, the Service has deter-

mined that available data do not justify consideration of a reclassification under the Endangered Species Act at this time.

Comments in response to the reclassification proposal should be submitted to the Director (OES), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240, no later than February 25, 1980.



Lothar Schow

The total population of the Bontebok—a horned Antelope similar in size to the Lechwe—was estimated to be fewer than 1,000. Bontebok National Park contains over 250 animals, an increase from the 17 present in 1931 when the National Park was proclaimed.

TWO BATS PROTECTED AS ENDANGERED

The Service has listed the Virginia and Ozark big-eared bats (*Plecotus townsendii virginianus* and *P.t. ingens*) as Endangered and, in an effort to curb the threat of human disturbance, has designated five caves as Critical Habitat for the Virginia big-eared bat (F.R. 11/30/79).

Both of these species are restricted to relatively small areas where they require specific conditions for hibernation and reproductive activity. They are highly intolerant of human presence, and have been known to readily abandon their roosts when disturbed by spelunkers, vandals, and even well-meaning biologists.

Virginia big-ear

The Virginia big-eared bat is still found in three separate populations centered in eastern Kentucky, southwestern Virginia, and eastern West Virginia, but many caves within this region have been abandoned. Although as many as 3,000 bats may remain in West Virginia, only three nursery colony caves are known in the State, making the entire population subject to extermination under adverse conditions. A serious decline has also occurred in the single known nursery colony in Kentucky, which contains less than 500 bats. Not more than a few hundred individuals survive in the Virginia population.

While six caves had been considered for designation as Critical Habitat for this species in the Service's original proposal (F.R. 11/2/77), the Service has determined that only five caves in West Virginia are suitable for designation as Critical Habitat at this time. The Service has opted to exclude from its determination the sixth cave located in Kentucky (at the request of the Kentucky Department of Fish and Wildlife Resources), as in this instance a formal designation would call attention to the area, increasing public use and disturbance to the bats. (Only five caves were included in the Service's 10/30/79 reproposal of Critical Habitat, bringing the initial proposal in line with 1978 amendments to the Endangered Species Act.)

Any action (such as blasting, construction, or increased human access) which would substantially alter the physical structure, temperature, humidity, or air flow of the designated caves could adversely modify Critical Habitat

since the Virginia big-eared bat depends on the maintenance of precise conditions for hibernating sites in the winter and for nurseries in the summer.

Ozark big-ear

Recent estimates indicate that the total population of Ozark big-eared bats may be down to 100-200 individuals. Found in only a few caves in

northwestern Arkansas, southwestern Missouri, and eastern Oklahoma, this species is exceptionally vulnerable.

The few survivors are not known to make periodic use of any particular cave for hibernation or maternity purposes, appearing at entirely different sites in subsequent years. (Designation of Critical Habitat has therefore been determined imprudent for this bat species.)

DESIGNATED CRITICAL HABITATS

The following table indicates all listed species for which Critical Habitat has been designated (exclusive of designations made by the National

Common Name	Scientific Name	C. H. Determined	Affected States (Areas)
Bat, Indiana	<i>Myotis sodalis</i>	F.R. 9/24/76*	IL, IN, KY, MO, TN, WV
Bat, Virginia big-eared	<i>Plecotus townsendii virginianus</i>	F.R. 11/30/79	WV
Manatee, Florida	<i>Trichechus manatus</i>	F.R. 9/24/76*	FL
Rat, Morro Bay kangaroo	<i>Dipodomys heermanni morroensis</i>	F.R. 8/11/77	CA
Wolf, gray	<i>Canis lupus</i>	F.R. 3/9/78	MI, MN
Blackbird, yellow-shouldered	<i>Agelaius xanthomus</i>	F.R. 11/19/76	PR
Condor, California	<i>Gymnogyps californianus</i>	F.R. 9/24/76*	CA
Crane, Mississippi sandhill	<i>Grus canadensis pulla</i>	F.R. 8/8/77	MS
Crane, whooping	<i>Grus americana</i>	F.R. 5/15/78	CO, ID, KS, NE, NM, OK, TX
Falcon, American peregrine	<i>Falco peregrinus anatum</i>	F.R. 8/11/77	CA
Kite, Everglade	<i>Rostrhamus sociabilis</i>	F.R. 8/11/77	FL
Palila	<i>Psittirostra bailleui</i>	F.R. 8/11/77	HI
Sparrow, Cape Sable	<i>Ammospiza maritima mirabilis</i>	F.R. 8/11/77	FL
Sparrow, dusky seaside	<i>Ammospiza maritima nigrescens</i>	F.R. 8/11/77	FL
Cavefish, Alabama	<i>Speoplatyrhinus poulsoni</i>	F.R. 9/9/77	AL
Chub, slender	<i>Hybopsis cahnii</i>	F.R. 9/9/77	TN, VA

Pitcher Plant Meeting Scheduled

A public meeting has been scheduled for February 7, 1980, at Gadsden, Alabama, regarding the listing of *Sarracenia oreophila*, better known as the green pitcher plant, as an Endangered species. The effective date of the final rulemaking is being re-extended from February 22, 1980, to April 7, 1980, to allow adequate time to prepare for the public meeting, and to provide for a subsequent 60-day waiting period following the meeting.

Marine Fisheries Service) through November 30, 1979. The BULLETIN will attempt to publish an updated table each December.

Common Name	Scientific Name	C. H. Determined	Affected States (Areas)
Chub, spotfin	<i>Hybopsis monacha</i>	F.R. 9/9/77	VA, TN, NC
Darter, leopard	<i>Percina pantherina</i>	F.R. 1/27/78	AK, OK
Darter, slackwater	<i>Etheostoma boschungii</i>	F.R. 9/9/77	AL, TN
Darter, snail	<i>Percina tanasi</i>	F.R. 4/1/76*	TN
Madtom, yellowfin	<i>Noturus flavipinnis</i>	F.R. 9/9/77	TN, VA
Trout, little kern golden	<i>Salmo aguabonita whitei</i>	F.R. 4/13/78	CA
Anole, giant	<i>Anolis roosevelti</i>	F.R. 7/21/77	PR
Boa, Mona	<i>Epicrates monensis monensis</i>	F.R. 2/3/78	PR
Coqui, golden	<i>Eleutherodactylus jasperi</i>	F.R. 11/11/77	PR
Crocodile, American	<i>Crocodylus acutus</i>	F.R. 9/24/76*	FL
Iguana, Mona ground	<i>Cyclura stejnegeri</i>	F.R. 2/3/78	PR
Lizard, St. Croix ground	<i>Ameiva polops</i>	F.R. 6/3/77*	Virgin Islands
Rattlesnake, New Mexican ridge-nosed	<i>Crotalus willardi obscurus</i>	F.R. 8/4/78	NM
Toad, Houston	<i>Bufo houstonensis</i>	F.R. 1/31/78	TN
Treefrog, Pine Barrens	<i>Hyla andersonii</i>	F.R. 11/11/77	FL
Turtle, leatherback sea	<i>Dermochelys coriacea</i>	F.R. 9/26/78	Virgin Islands
Antioch Dunes evening-primrose	<i>Oenothera deltoides</i> ssp. <i>howellii</i>	F.R. 8/31/78	CA
Contra Costa wallflower	<i>Erysimum capitatum</i> var. <i>angustatum</i>	F.R. 8/31/78	CA

J.H. update/correction F.R. 8/11/77

Bobcat Exports Halted from Several States

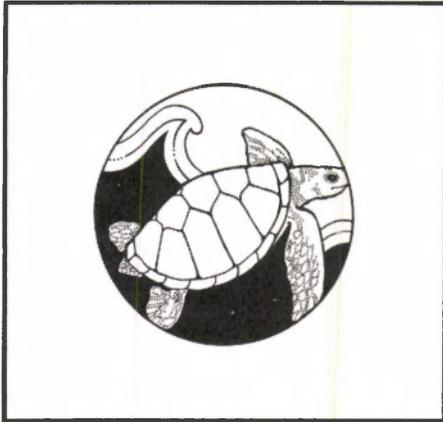
Subsequent to a suit filed by Defenders of Wildlife, Judge June Green of the U.S. District Court of the District of Columbia has ordered exports of bobcat pelts taken during the 1979-80 season halted from seven States, or portions thereof.

The court had granted a temporary restraining order—essentially banning bobcat exports until the case was argued—after Defenders challenged the Endangered Species Scientific Authority's (ESSA) action in finding that exports would not be detrimental to the bobcat's (*Lynx rufus*) survival as well as our Service's action in issuing export permits in the absence of an "adequate management program" (see November 1979 BULLETIN).

In her December 12 order, Judge Green dismissed the complaint with regard to the Navajo Nation and 28 States (from which exports remain lawful). However, mostly due to the lack of adequate biological data and/or State controls, or evidence of population declines, the court prohibited ESSA and the Service from allowing exports of 1979-80 bobcat pelts from Florida, Massachusetts, New Mexico, North Dakota, South Dakota and Wisconsin, as well as from the eastern region of Oregon, (inhabited primarily by the subspecies *pallascens*) and the high plains ecological area of Texas (roughly corresponding to the range of subspecies *baileyi*).

All State fish and game agencies are being notified so that affected managers and trappers may be aware of the order.

Defenders has indicated its intent to appeal the decision, with a request that all bobcat exports be enjoined for the 1979-80 season.



SEA TURTLE CONSERVATION ADDRESSED AT WORLD MEETING

Biologists, conservationists, and government officials representing 40 nations gathered in Washington November 26-30 for the first World Conference on Sea Turtle Conservation.

Sponsored by the World Wildlife Fund-U.S., Fish and Wildlife Service, National Marine Fisheries Service, and several conservation organizations, the Conference assembled more than 350 participants for presentations on sea turtle biology, threats to all seven declining species of sea turtles, and their worldwide status. (Papers were presented on such topics as nesting ecology and behavior; reproductive physiology; nutrition, metabolism, and growth; population dynamics; incidental catch and the development of excluder panels; subsistence hunting; international trade and enforcement problems; habitat alteration and pro-

BOX SCORE OF SPECIES LISTINGS

Category	Number of Endangered Species			Number of Threatened Species		
	U.S.	Foreign	Total	U.S.	Foreign	Total
Mammals	35	251	286	3	21	24
Birds	67	145	212	3		3
Reptiles	11	48	59	10		10
Amphibians	5	9	14	2		2
Fishes	29	11	40	12		12
Snails	2	1	3	5		5
Clams	23	2	25			
Crustaceans	1		1			
Insects	6		6	2		2
Plants	49		42	7	2	5
Total	228	467	695	44	23	67

Number of species currently proposed: 166 animals
1,850 plants (approx.)

Number of Critical Habitats listed: 35

Number of Recovery Teams appointed: 66

Number of Recovery Plans approved: 30

Number of Cooperative Agreements signed with States:
32 (fish & wildlife)
3 (plants)

November 30, 1979

tection; regional status; and aquaculture and headstarting.)

In fulfillment of its primary goal, the Conference Scientific Committee drafted a Sea Turtle Conservation Strategy, the purpose of which is "to develop conservation action based on the biology of the species that will return sea turtles to former abundance while allowing controlled exploitation for the benefit of generations of humans yet to come."

The document identifies major threats to the turtles, and sets forth policy considerations for conservation in the areas of habitat protection, management, control of exploitation,

incidental catch, education, legislation, and cooperative conservation efforts. A list of action projects complements the strategy plan, which is to be monitored and implemented by a standing committee. Copies of the final strategy paper and project list will be available in English, French, and Spanish the end of February from World Wildlife Fund-International, Avenue du Mont Blanc, CH-1196, Gland, Switzerland (or from IUCN at the same address.

The cost and availability of the Conference proceedings—to be published by late summer 1980—will be announced.



ENDANGERED SPECIES TECHNICAL BULLETIN

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