



ENDANGERED SPECIES TECHNICAL BULLETIN

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

CALIFORNIA APPROVES NEXT STAGE OF CONDOR RESEARCH

On August 7, 1981, the California Fish and Game Commission unanimously approved the granting of a State permit, authorizing the capture and handling this season of a maximum of nine condors (*Gymnogyps californianus*) for captive breeding and studies in the wild using radio telemetry. Accomplishment of these approved activities is central to the Cooperative California Condor Conservation Program, signed in December 1979, by the Fish and Wildlife Service, National Audubon Society, California Department of Fish and Game, U.S. Forest Service, and the Bureau of Land Management.

G. Ray Arnett, the Interior Department's Assistant Secretary for Fish and Wildlife and Parks stated regarding the approved permit, "We are pleased with the Commission's vote of confidence. That confidence is well placed in the Fish and Wildlife Service, with its proven success record of breeding endangered species in captivity. While no one can guarantee that our efforts with the condor will succeed, I am convinced that the program is biologically imperative. Time is running out for the California condor."

Fewer than 30 of these large birds (9-foot wingspan) remain in the rugged mountainous areas north of Los Angeles. Experts estimate that the condor population has declined steadily by about 2.5 birds per year since 1966. "Unless this trend is reversed," Arnett said, "the condor could become extinct within the next decade and could be functionally extinct before then."

According to Dr. H. Randolph Perry, the Service's supervisor of the California Field Station, trapping efforts will begin in October. Only 5 condors may be cap-

tured without further authorization from the California Fish and Game Commission: three for captive breeding and two for the attachment of radio transmitters. The three captives will be used to initiate captive breeding programs at the San Diego Wild Animal Park and the Los Angeles Zoo. The two birds fitted with radio transmitters will be carefully monitored before permission is sought to capture additional condors for studies using radio telemetry.

Badly needed habitat utilization information will become available once the

first California condors are fitted with transmitters and radio-telemetry studies are begun. Studies with the Andean condor (*Vultur gryphus*), the closest surrogate species available, has also yielded valuable data on sources of mortality; roosting, breeding, and feeding areas; and movement patterns. (See the February 1981 BULLETIN.)

The Federal permit authorizing the capture, captive breeding, radio telemetry, and other research was issued on July 24, 1981. State and Federal permits are necessary to fully implement the long-range Cooperative Program.

Additional stories on the California condor and condor recovery efforts may be found in the BULLETIN's May 1979 Special Report and regular issues for January and August of 1980.



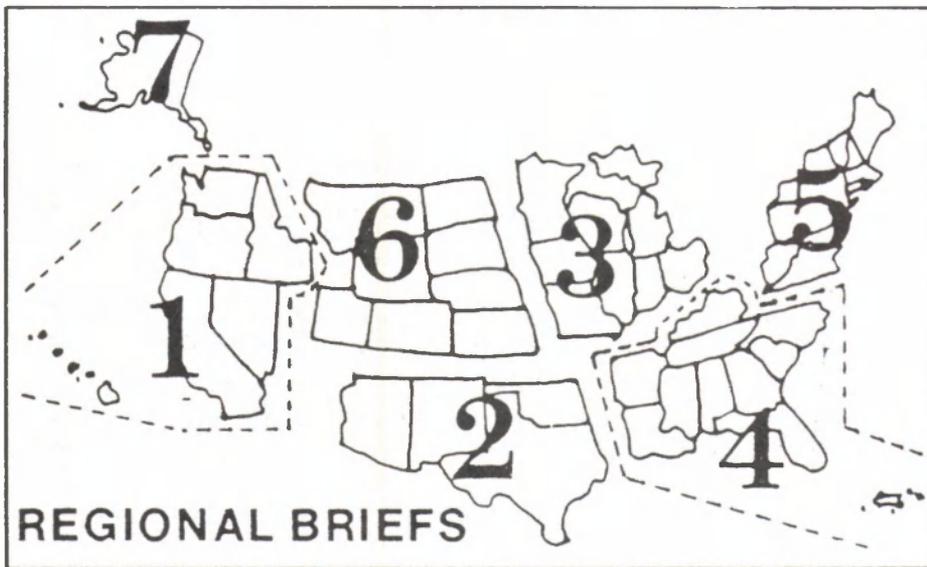
Photo by William P. Mull

The colorful Hawaiian tree snail pictured above (Achatinella sowerbyana) is one of 19 species of the genus Achatinella still thought to remain on the island of Oahu, Hawaii. The entire genus, endemic to the island and historically composed of 41 species, is listed as Endangered.

January Rules Become Effective

The Department of the Interior has completed its review of four final U.S. Fish and Wildlife Service rules which were published during January 1981. The rules have been determined "not major" with regard to Executive Order 12291, and August 31, 1981, has been established as a new effective date, replacing the dates originally specified for each affected species.

The affected rules related to a genus of Hawaiian tree snails (*Achatinella*); Texas poppy-mallow (*Callirhoe scabriuscula*); gypsum wild buckwheat (*Eriogonum gypsophilum*); and Todsens's pennyroyal (*Hedeoma todsenii*). For additional information on these species see the February 1981 BULLETIN, pages 5-7.



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

Region 1—This year 59 young peregrines (*Falco peregrinus*) were

fledged at 41 active nest sites in California. Natural fledging occurred with 40 of the birds; 19 were placed in wild nests which might have failed. An additional five young fledged from two hack sites. All six eaglets (*Haliaeetus leuco-*

cephalus) transferred from Washington to Catalina Island, California, have fledged. Natural nesting has not occurred on the island for 30 years.

Region 2—As part of a joint State/Federal action that should prevent the razorback sucker (*Xyrauchen cypho*) from being listed under the Endangered Species Act as Threatened, 7,000 fish were stocked into the tributaries of the Salt, Gila, and Verde Rivers in Arizona. An additional 7,000 razorbacks will be stocked in September, as will an estimated 100,000 fish per year for the next 9 years.

The Rancho Nuevo sea turtle project is completed for this season—the most successful year to date with regard to numbers of adult nesters and eggs laid. (See August 1981 BULLETIN, Regional Brief 2 for more information).

A contract has been awarded for a 1-year study to determine the status of the ocelot (*Felis pardalis*) in Texas. The study should better define what steps need to be taken to effect the species recovery.

Dr. Aaron H. Long, a professional veterinarian in Texas, has been presented the U.S. Fish and Wildlife Service's citizen award for his contribution to the national effort to restore the red wolf (*Canis rufus*). Dr. Long has provided veterinarian services to the wolf since 1973, assisting in regional field studies, giving medical assistance, and helping with the captive breeding program in Tacoma, Washington.

Region 3—Service botanists representing regions 1-6 met with representatives of the Missouri Department of Conservation, the Missouri Botanical Garden, and the Nature Conservancy in St. Louis, Missouri, August 19, 1981, to do preliminary planning for a national plant recovery symposium. The symposium is tentatively scheduled for the end of 1982.

Region 4—The Chittenango ovate amber snail (*Succinea chittenangoensis*), New York population, was listed as Threatened in a final rule published in July 1978. It was noted in the final rule that a snail population identified by Leslie Hubricht as *S. chittenangoensis* has been recently discovered on the North Carolina-Tennessee border (Stratton Gap area). The Service deferred taking any listing action on this discovery for lack of adequate information.

In August of this year, personnel from the Asheville Area Office, in company with Leslie Hubricht and others, revisited the Stratton Gap area and collected a number of specimens which appear, almost certainly, to be *S. chittenangoensis*. They also collected other specimens some 3 miles away with a slightly different form which could possibly be the same species. Efforts to

Continued on page 5

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

F. Eugene Hester, *Acting 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 L. 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
Clare Senecal Kearney, *Editor*
(703-235-2407)

Regional Offices

Region 1, Suite 1692, Lloyd 500 Bldg., 500 N.E. Multnomah St., Portland, OR 97232 (503-231-6118); Richard J. Myshak, *Regional Director*; Edward B. Chamberlain, *Assistant Regional Director*; Phil Lehenbauer, *Acting Endangered Species Specialist*.

Region 2, P.O. Box 1306, Albuquerque, NM 87103 (505-766-2321); Jerry

Stegman, *Acting 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); Walter O. Stieglitz, *Acting Regional Director*; Alex B. Montgomery, *Acting Assistant Regional Director*; Kenneth Chitwood, *Acting 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*.

Region 7, 1101 E. Tudor Rd., Anchorage, AK 99503 (907-276-3800, ext. 495); Keith M. Schreiner, *Regional Director*; Jon Nelson, *Ass't Regional Director*; Dennis Money, *Acting Endangered Species Specialist*.

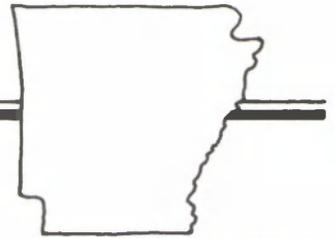
U.S. Fish and Wildlife Regions

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.

The ENDANGERED SPECIES TECHNICAL BULLETIN is published monthly by the U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240.

State Report:

Arkansas Studies State Species of Concern



Arkansas Game and Fish Commission

In recent years an increasing number of panther (*Felis concolor*) reports have been made to the Arkansas Game and Fish Commission, giving new hope that this species still remains in small numbers in the more remote areas of the State. The last actual panther kill report, however, dates back to 1975.

As sighting reports are made, they are "checked out" by Commission biologists and ranked on a scale of one to four according to degree of validity. In 1978, both scat and track (level 1) indications of the species were found. Since that time, five separate sightings have been made by State and Federal employees (level 2). All of the sightings were made within the areas traditionally recognized as panther habitat; however, no observations were reported in close proximity to the White River National Wildlife Refuge where they are also thought to be.

The panther historically found in Arkansas is listed as Endangered under the Endangered Species Act of 1973, and is one of the species being studied by the Arkansas Game and Fish Commission under its Cooperative Agreement with the U.S. Fish and Wildlife Service which was signed in 1977. Matching funds from this agreement have helped support surveys to determine the incidence and location of the species in Arkansas. The funds have also assisted the State with public education projects which emphasized the species' need for protected habitat and isolation. Preliminary considerations have been given to establishing the critical habitat of the species.

Other federally listed species which Arkansas has studied with the assistance of Cooperative Agreement funds from Section 6 of the 1973 Act are the red-cockaded woodpecker (*Picoides [=Dendrocopos] borealis*), American alligator (*Alligator mississippiensis*), Indiana bat (*Myotis sodalis*), gray bat (*Myotis grisescens*), and the Ozark big-eared bat (*Plecotus townsendii ingens*).

Red-Cockaded Woodpeckers

Arkansas hosts a remnant population of the red-cockaded woodpecker.



Arkansas Game and Fish biologists, Sam Barkley (left) and Craig Uyeda (right), taking plaster casts of suspected puma track.

Nesting and roosting habitat for this species are specific to 60 year old (or older) pine trees which are diseased by red-heart fungus (*Fomes pini*). These trees must have sizeable buffer areas and understory low enough to leave hollowed out tree cavities clear for access. Unfortunately, intensive forest management in southern Arkansas, as in other areas of the Southeast, has reduced the availability of mature pines, especially diseased ones, and has thereby contributed to the decline of woodpeckers in the State. About four years ago the Commission initiated, through the University of Arkansas (UA), an extensive study to determine the distribution, abundance, and critical habitat characteristics of the species in Arkansas. A search for remaining suitable

pines was part of the study.

Location reports of over 1000 cavity trees used for nesting and roosting, or both, by this bird were received from Georgia-Pacific Corporation, International Paper Company, Potlatch Lumber Company, Olinkraft Corporation, the Felsenthal National Wildlife Refuge, the Arkansas Natural Heritage Commission, the Arkansas Audubon Society, and from private individuals. After visiting most of the sites, the UA team, headed by Dr. Douglas James, was able to determine rather precisely the actual number of red-cockaded cavity trees remaining in Arkansas. Their studies show that 88% of the known colonies are on private timber land.

Continued on page 4

State Report:

Continued from page 3

A 2-year follow up project, funded by the State through UA, was begun in 1980 to accomplish two tasks related to the red-cockaded woodpecker. The first was to determine the status of the species in the Ouachita National Forest and the second dealt with characterizing its summer foraging habitat requirements at the Felsenthal National Wildlife Refuge. Part one of the study was accomplished by cruising all accessible roads in the forest and visually estimating the past or present suitability of observed red-cockaded woodpecker habitats. Areas that may have been inhabited by the species in the past were also examined. The survey indicated that large tracts of the forest are presently unsuitable for use by the species due to the lack of suitable pine stands. The second part of the project involved trapping and color banding several red-cockaded woodpeckers at the Felsenthal National Wildlife Refuge located in southern Arkansas. A clan having a marked individual was followed from roost departure in the morning through the day, enabling the researchers to determine home range, territory size, and foraging habitat characteristics. The results of this study will be published this fall.

The Felsenthal National Wildlife Refuge contains high densities of red-cockaded woodpeckers. Because of favorable management practices there, the survival of the woodpeckers seems assured. The future of the red-cockaded woodpecker on private lands, however, is not bright.

American Alligators

Since 1972 the State has restocked 2,652 alligators in suitable portions of the species' historical range in Arkansas. Some were placed on State land, but most of the animals were placed, at the owner's request, on private land. (Land-owners desire the alligator as a control animal for nuisance animals.) Most of the translocated individuals were taken from Louisiana's Sabine and Rockefeller National Wildlife Refuges.

indications are that the translocated alligators are thriving and that some reproduction is occurring among the stocked alligators. Stocked individuals, marked by clipped tall scutes, have been seen nesting in the southwest corner of the State, and young (1 to 2 feet long) alligators have also been seen in areas previously void of the species prior to restocking. More stocking will be done in selected, remote sites, particularly in southern and eastern delta counties, in areas free from the threat of drainage, cultivation and conflict with human interests.

Endangered Bats in Arkansas

All three of Arkansas' federally listed bat species are found historically in the Ozark Mountain region in the north-western and north central section of the State. in order to gather information on their critical habitats and to assist in recovery planning for these species, the Commission contracted with Dr. Michael Harvey of Memphis State University (MSU) to conduct several years of research. The U.S. Forest Service (Ozark National Forest) and the National Park Service (Buffalo National River) also supported the research on lands they manage. Dr. Harvey and his assistants had considerable success in locating caves and colonies of the listed bats.

Initial efforts of the MSU team consisted of cave and colony searches on a county by county basis. A variety of contacts were made for leads, including personnel from local, State, and Federal governmental agencies; members of the Association for Arkansas Cave Studies; the Cave Research Foundation; local spelunkers; and biologists and geologists from the State colleges and universities. Existing literature, which is relatively small, was also reviewed. The MSU researchers received information on over 200 caves in the State; they found approximately 60 caves to be significant habitat for Arkansas endangered bats. As a result of their observations and study, the team has made initial management suggestions, appropriate to each bat cave situation.

Bonanza Cave, located in Baxter County near the White River on Ozark National Forest lands, is the only major gray bat hibernaculum in Arkansas and one of the most important caves for the species west of the Mississippi River. MSU researchers found over 250,000 bats at this cave. The team spent con-

siderable time observing the flight patterns of the bats in and out of the cave, and noted that the animals had some difficulty negotiating the gate which was already in place at the cave's opening to protect the species. Upon the recommendation of the U.S. Fish and Wildlife Service's Indiana Bat/Gray Bat Recovery Team, the MSU team replaced this small horizontal gate with a vertical "mock up" gate which they designed. The new gate which was placed a few feet from the cave's natural entrance, appeared to allow easier access for the bats. in early August 1981, a permanent gate, modeled on the "mock up," was put in place by the Forest Service.

The Indiana bat is not very common in Arkansas. The MSU team did find one hibernating colony of about 5,000—the largest known colony in the State. They also found the first known maternity colony (about 170 bats) and the largest known hibernating colony (about 420) of the Ozark big-eared bat.

Bald Eagle

According to the mid-winter National Wildlife Federation bald eagle survey in which the State participates, Arkansas has between 400-500 migrating eagles. However, no successful nesting of the species has taken place in Arkansas since about 1930, although there have been several known attempts in recent years. In hopes of reestablishing a breeding eagle population in the State, the Commission is planning to build several hacking stations next year from which they will fledge eaglets.

Fish Species of Concern

The Commission has contracted jointly with Dr. Henry W. Robinson of Southern Arkansas University



Arkansas Game and Fish Commission biologists measuring and weighing marked alligators prior to releasing them in Arkansas.

Arkansas Game and Fish Commission Photo

(Magnolia) and Dr. George L. Harp of Arkansas State University (Jonesboro) to study four endemic Arkansas fish. These "species of concern" are the pale-back darter (*Etheostoma pallidorsum*), yellow cheek darter (*Etheostoma moorei*), Caddo madtom (*Noturus taylori*), and Ouachita madtom (*Noturus lachneri*). All of these fish were

included in a 1975 status review published by the Fish and Wildlife Service.

Arkansas' Program

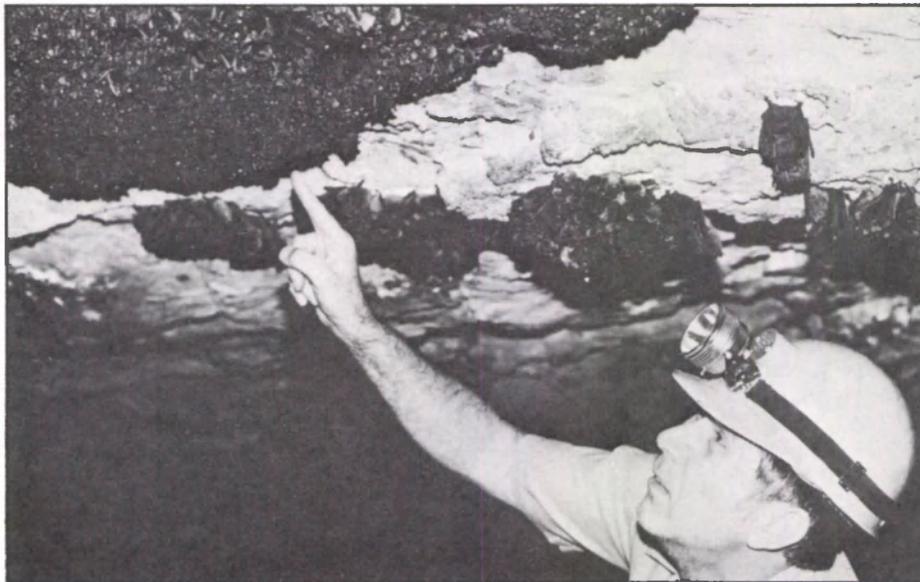
Arkansas' endangered species program is run entirely by two Commission employees, Mr. Harold E. Alexander,

Endangered Species Coordinator, and Mr. Sam Barkley, Endangered Species Biologist. Both men are located within the Commission's River Basin and Governmental Relations Division, which is, essentially, a review agency for proposed projects. Work involving some of the States' endangered species and much coordination work is done by this small staff, however, most of the species work is accomplished through contracts with various State academic institutions and through other divisions of the Commission.

Mr. Alexander and Mr. Barkley are assisted by a twelve member Technical Committee composed of biologists from State colleges and universities. This advisory group is now reviewing a list of species which will ultimately be considered the State's official list of species of concern.

Arkansas has no specific endangered species legislation, but receives authority for the conservation of all fish and wildlife through a State Constitutional Amendment. Authority to conserve endangered plants resides with the Arkansas Natural Heritage Commission. Hopefully, funding for both animal and plant endangered species conservation will soon be enhanced by a tax checkoff system—possibilities for which are being evaluated at this time.

Photo by Dr. Michael J. Harvey



Dr. Michael J. Harvey examining clusters of Indiana bats (*Myotis sodalis*) in a Newton County, Arkansas, cave. Clusters contain over 300 bats per square foot.

Regional Briefs

Continued from page 2

confirm the identification are now in progress.

Beginning in the winter of 1979-1980, a problem came to light involving sea turtle mortalities caused by maintenance dredging in the Port Canaveral ship channel, Brevard County, Florida. It was first thought only to involve hibernating turtles, but now it appears that some turtles bury up in the ship channel even during warmer months. Removing the turtles ahead of the dredge by trawling and releasing them some distance away was tried this past year; nevertheless a number of turtles were killed.

During the spring of 1981 a task force composed of all involved agencies was formed to make recommendations to the Army Corps of Engineers for alleviating the problem. Previous mortalities have been associated with dredging accomplished through private contractors, but this summer a Corps dredge has been operating in the channel, and the task force has capitalized on this opportunity to further evaluate the problem. One task force recommendation that is to be tried in the near future is

the use of a barrier cage placed on the dredge's suction foot to exclude the turtles. An evaluation of using a trawler to remove turtles from the dredge's path will also be conducted. The captured turtles will be equipped with sonic tags and then released both in the immediate area and some distance away in order to study their dispersal. Hopefully these studies will eventually lead to a solution to the problem.

Region 6—Service biologists on the Colorado River Fishery Program Team located a Colorado squawfish (*Ptychocheilus lucius*) spawning area on the Yampa River in Colorado. The concentration of spawning fish was found by following a radio-tagged squawfish. This is the first time a major spawning area for the Colorado squawfish has been found and documented.

The Service is developing a Conservation Plan for the Endangered Colorado squawfish, humpback chub (*Gila cypha*), and bonytail chub (*Gila elegans*) in the Upper Colorado River system. It should be completed in mid-1982. The Plan will describe in detail how certain recovery actions identified in the recovery plan as being needed for the preservation, recovery, and maintenance of the fish will be carried out. Information gained from the Colorado River Fishery Program will be invaluable

during the development of management practices that will be presented in the Plan. Funding to carry out the Plan will come primarily from the water users and developers whose projects are responsible for the degradation of the fish habitats.

The Montana Department of Fish, Wildlife and Parks, U.S. Forest Service, Bureau of Land Management, and the Service have embarked on a 10-year wildlife monitoring/evaluation program of the Rocky Mountain Front area in Montana. Many species will be studied, including the following listed species: grizzly bear (*Ursus arctos horribilis*), gray wolf (*Canis lupus*), peregrine falcon (*Falco peregrinus*), and bald eagle (*Haliaeetus leucocephalus*). The program will monitor the impact of human activity on wildlife displacement, population parameters, and habitat changes. The information will be used to develop and implement land management plans, recovery plans, and management guidelines.

Region 7—Approximately 390 Aleutian Canada geese (*Branta canadensis leucopareia*) from Patuxent Wildlife Research Center and Northern Prairie Research Center were released on Alaid-Niski Islands in the Aleutians. The Service hopes to establish nesting areas there as has been done on Buldir.

Dallas/Fort Worth Designated Port of Entry

Dallas/Fort Worth (DFW), Texas, has been designated by the Service as the United States' ninth Customs port of entry for the importation and exportation of wildlife (F.R. 9/1/81), effective immediately. The "designated port" status authorizes importers and exporters of wildlife, including parts and products, to use direct international air service to and from DFW, thereby eliminating the need to route shipments through other designated ports or to obtain special exception permits.

Background

On July 14, 1980, the Service published in the *Federal Register* a proposal to classify DFW as a designated

port. A public hearing was then held on July 30 in Washington, D.C., and comments from interested parties were accepted until August 13. Of the eight responses to the proposal, half supported it and half wanted the status for Houston, Texas, either in place of or in addition to DFW.

In reply, the Service stated that it had considered Houston, but decided on DFW because tremendous growth in air transportation has created world trade centers in inland cities. About 70 percent of the wildlife inspected and cleared by the Service arrives in the U.S. as air

cargo, and another 10 percent as part of the accompanying baggage of airline passengers. The Service also noted that the DFW airport, which is already one of the world's busiest, is expected to continue its accelerated growth.

The designated port is the keystone of the wildlife importation and exportation control process regulated by the Service. Authority for such designations, and the requirement (with limited exceptions) that all wildlife be imported and exported through ports of entry, are found in Section 9(f) of the Endangered Species Act.

Federal Aid Programs Fund Endangered Species Research

Prior to 1976 when Congress first authorized Grant-in-Aid funds under Section 6 of the Endangered Species Act of 1973, some States used Federal Aid in Wildlife Restoration (Pittman-Robertson or P-R) and Federal Aid in Sport Fish Restoration (Dingell-Johnson or D-J) matching funds for endangered species research and inventories. Both P-R and D-J are still being used by some States for endangered species, under a three-fourths Federal funding arrangement.

Funds for the P-R program come from a manufacturer's excise tax on sporting arms, ammunition, archery equipment and handguns and they may be used to benefit wild birds and mammals, and for hunter education. Funds for the D-J program come from a manufacturer's excise tax on certain sport fishing equipment. This program is more restrictive than P-R in that only projects which involve potential sport fish species (endangered trout or squawfish for example) may be funded.

The table below lists the endangered species, the Federal funds planned to be spent in Fiscal Year 1981, and the States involved in research and inventories on endangered species. Except where specified all funds are from the P-R program.

SPECIES/JOB	FEDERAL \$	STATE/TERRITORY
Mammals		
Bats, Marianas fruit ¹	7,600	Guam
Bear, grizzly	24,225	Montana
Cats (ocelot, margay, jaguar)	5,109	Texas
Jaguar	750	Arizona
Pronghorn, Sonoran	3,705	Arizona
Birds		
Alala (Hawaiian crow)	12,450	Hawaii
Bobwhite, masked	750	Arizona
Crane, whooping	6,537	Texas
Birds		
Doves, (Native) ¹	2,800	Guam
Eagle, bald	4,350	Arizona
Eagle, bald	1,500	Nevada
Eagle, bald	4,716	Texas
Falcon, peregrine	750	California
Falcon, peregrine	375	Nevada
Falcon, peregrine	5,437	New Mexico
Falcon, peregrine	375	South Dakota
Falcon, peregrine	1,955	Texas
Forest Bird	5,850	Hawaii
Gallinule ¹	2,000	Guam
Hawaiian Coot	2,000	Hawaii
Hawaiian Gallinule	2,000	Hawaii
Hawaiian Stilt	2,000	Hawaii
Koloa (Hawaiian Duck)	2,000	Hawaii
Nene	18,450	Hawaii
Pallia	1,725	Hawaii
Pelican, brown	46,416	Puerto Rico
Pelican, brown	3,144	Texas
Pelican, brown	9,100	Virgin Islands
Rail, Guam ¹	2,400	Guam
Rail, Yuma clapper	7,500	Arizona
Shearwater, Newell's Manx	2,100	Hawaii
Swiftlet ¹	1,700	Guam
Woodpecker, red-cockaded	2,751	Texas
Fish		
Trout, Arizona ²	750	Arizona
Multiple Species Studies		
Status work/listed species	750	Arizona
Coordination & Technical Assistance	3,600	Guam
Recovery Plan Development	3,750	Hawaii
Status work/listed species	1,125	Kentucky
Zuni Mountains Area Survey ³	2,550	New Mexico
Status Work/listed species	36,156	Texas

¹—Candidate species

²—D-J funds

³—Both P-R and D-J funds

August 1981

The Service's Office of the Scientific Authority (OSA)—replacing the Endangered Species Scientific Authority (ESSA)—functions as staff to the U.S. Scientific Authority for the Convention on international Trade in Endangered Species of Wild Fauna and Flora (CITES). OSA reviews applications to export and import species protected under the Convention, reviews the status of wild animals and plants impacted by trade, makes certain findings concerning housing and care of protected specimens, and advises on trade controls.

OSA Sets November Deadline for Data

In the June 30, 1981, *Federal Register* the Service published a 10-year review of species listed in the CITES appendices. (See July 1981 BULLETIN). Since it is imperative that the appendices reflect the true biological and trade status of the species listed on them, OSA urges all persons having such specialized knowledge of these species to provide written data and comments by November 15, 1981.

A packet of information including: 1) a list of all species listed under CITES; 2) lists of native North American plants and wildlife listed under the treaty; 3) a copy of the criteria for listing adapted by the CITES party nations in 1976 ("Berne Criteria"); and 4) a copy of the format by which proposals are submitted, has been assembled to assist commentators in compiling and submitting data. To receive this information write or call the Office of the Scientific Authority, U.S. Fish and Wildlife Service, Washington, D.C. 20240, phone 202/653-5948.

Revised Appendices Available

Copies of the revised appendices to the CITES (50 CFR Part 23) which include the amendments adopted by the CITES Parties of the New Delhi meeting in March 1981 were published in the September 4, 1981, *Federal Register*. Copies are available from the Wildlife Permit Office, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

August 1981

Service Recognizes Recovery of Alligator in Louisiana

by Michael Bender

In formal recognition of the biological recovery of the American alligator (*Alligator mississippiensis*) in Louisiana, the Service has reclassified the species in that State to the less restrictive category of Threatened by Similarity of Appearance (F.R. 8/10/81). This action permits a regulated statewide harvest, in accordance with the Service's special rules on Threatened species and with State law. Except for minor clarifications of the boundary between Endangered and Threatened alligators in South Carolina and Georgia, the rule does not affect the classification of this reptile in other parts of its range.

Decline and Recovery

The alligator was listed as Endangered in 1967 after poaching and overhunting led to a decline in the species. Subsequent recovery of the alligator in some parts of its range under Federal and State protection has allowed the Service to gradually reclassify the species in those areas where it is most secure (see accompanying map).

As part of a continuing effort to monitor the condition of the alligator in Louisiana, the Service contracted Dr. R. H. Chabreck of Louisiana State University in 1979 to compile a status review. His findings, along with two reports (1978 and 1980) by Dave Taylor of the Louisiana Department of Wildlife and Fisheries, provided evidence of the species' recovery used in developing the May 1, 1981, reclassification proposal (see May 1981 BULLETIN).

Comments on the Proposal

Two public meetings on the proposal were held on May 28 at Louisiana State University, with a total of about 70 people in attendance. After a presentation by Service personnel and a description of Louisiana's alligator management program by a State representative, fourteen comments were received. The only comment unfavorable to the proposal was presented on behalf of the Fund for Animals, Inc., which questioned the advisability of opening non-marsh areas to alligator harvest, and suggested that a final decision be delayed until data furnished by the State could be verified independently. In response, the Service pointed out that: 1) the Service participated in the gathering of data, 2) the information was independently evaluated, and 3) alligator habitat in

Louisiana is abundant and relatively secure. The remaining comments supported the proposal.

Most of the written responses received during the 60-day public comment period also favored a reclassification. Representatives of the American Society of Ichthyologists and Herpetologists, IUCN/SSC Crocodile Specialist Group, and Florida and Georgia State wildlife agencies agreed that the alligator has recovered in Louisiana. The Governors of Louisiana and Arkansas also endorsed the proposal, as did the American Alligator Recovery Team.

Effects of the Reclassification

The final rule, which took effect upon publication, changes the status of the alligator in all Louisiana parishes to Threatened by Similarity of Appearance. This designation transfers management authority to the State, while assisting Federal wildlife law enforcement personnel in protecting alligators of less secure populations as well as other crocodilians.

For a number of years, Louisiana has conducted a controlled harvest for alligators in the southern parishes where the reptile had already been recognized as recovered, and the reclassification gives the State the option to broaden the harvest statewide in accordance with special Service regulations and State laws. This year's season ran from August 31 through September 30, and the number of additional animals taken is thought by the State to be marginal. Although an expanded harvest program is not expected to have a detrimental effect on the species' population as a whole within the State, the Service will continue to monitor its status. Further, exportation of alligators (and products made from them) will remain subject to control under the provisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

The reclassification to Threatened by Similarity of Appearance also removes Federal agency responsibilities under Section 7 of the Act. It is not, however, an irreversible commitment by the Service; relisting of the alligator in Louisiana would be possible if the State substantially changes its management program, or if other changes occur which pose new threats to the species.

Conference

The third *Rocky Mountain Regional Plant Conference*, entitled "Energy Development and Rare Plants: Planning for the Future," will be held November 5-6, 1981, at the Denver Botanical Gardens, 909 York Street, Denver, Colorado. The conference is sponsored by the Botanical Gardens in conjunction with the native plant societies of Colorado, New Mexico, Utah, and Wyoming and with the Association of Western Native Plant Societies. For additional information call Jacqui Lansing (303/234-6443) or Scott Peterson (303/623-1913). General admission will be \$10.00; admission for Denver Botanical Gardens or Native Plant Society members and students will be \$5.00. Fees should be sent to the Colorado Native Plant Society, Rare Plant Conference, P.O. Box 200, Fort Collins, CO 80522.

New Publications

These are The Endangered Species, a book by Charles Cadieux, illustrated by Bob Hines, was published in June 1981 by Stone Wall Press, Inc., Washington, D.C. 20007. It is currently being distributed by the Stephen Greene Press, Inc., Battleboro, Vermont, 05301 at \$15.00 per copy. Beginning January 1982, the book will be distributed by Stackpole Books, Cameron and Kelker Streets, P.O. Box 1831, Harrisburg, Pennsylvania, 17113 at \$16.95 each.

Just over 200 pages in length, the book contains 32 short chapters, each directed to one, or several, species on the brink of extinction. The remaining 15 chapters, also short, explain endangered species legislation, list endan-

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	9	8
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: 17 animals
8 plants

Number of Critical Habitats listed: 50
Number of Recovery Teams appointed: 68
Number of Recovery Plans approved: 41
Number of Cooperative Agreements signed with States:
38 fish & wildlife
10 plants

August 31, 1981

gered species, describe the environmental roles of various Federal agencies, discuss certain conservation issues, and refer the reader to other sources of information.

Rare and Endangered Vascular Plant Species of West Virginia, prepared by a group of West Virginia botanists, is available from the Service's Regional Office in Newton Corner, Massachusetts. A limited number of similar publications for Delaware, Maryland, Pennsylvania,

and Virginia are also available. Request copies from Dick Dyer, U.S. Fish and Wildlife Service, Suite 700, One Gateway Center, Newton Corner, Massachusetts 02158.

A new publication entitled *Vascular Plant Species of Concern in Idaho* is available for \$7.50 from the Forest Wildlife and Range Experiment Station, University of Idaho, Moscow, Idaho 83843. This work was partially funded by the Service's Denver Regional Office.



ENDANGERED SPECIES TECHNICAL BULLETIN



POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR

Int 423

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

September 1981, Vol. VI, No. 9