April 1983 Vol. VIII No. 4

ENDANGERED SPECIES

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

12 Foreign Mammals Proposed for Listing

The Service has proposed that 12 species of foreign mammals be listed as Endangered (F.R. 3/1/83). If approved, the rule would restrict most importation of these animals into the United States and allow cooperative research programs to be undertaken in their behalf.

• Rodriguez flying fox fruit bat (*Pteropus rodricensis*)—This bat occurs only on Rodriguez Island in the Indian Ocean, where less than 2 percent of its original habitat remains. Loss of the mixed natural vegetation needed to maintain its food sources, cyclone damage, and hunting by the local human population for food are the main threats to the species.

• Bulmer's flying fox fruit bat (*Aproteles bulmerae*)—After being known only from fossil remains dating back 9,000-12,000 years in central Papua New Guinea, a live specimen was taken by a native hunter in a mountain cave to the west in 1975. An intensive effort was made in 1977 to locate other individuals of the species, but a local hunter had already eliminated them from the cave where the first live bat was killed. Fruit bats are considered a delicacy in Papua New Guinea, and hunting has probably wiped out this species except perhaps in remote and sparsely inhabited areas in the western part of the country.

• ghost bat (*Macroderma gigas*)—Although this bat once occurred throughout much of Australia, it is now found only in the northern section. Populations are being destroyed by limestone quarrying and vandalism.

• bumblebee bat (*Craseonycteris thonglongyai*)—Found only at one location in western Thailand, this bat, which is one of the smallest mammals in the world (weighing about 2.5 grams), also is being jeopardized by habitat loss. The teak-bamboo forests in which it forages for insects have been largely destroyed by deforestation.

• Singapore roundleaf horseshoe bat (*Hipposideros ridleyi*)—This Malayan species has been taken only twice: once in Singapore in 1910, and once near Kuala Lumpur in 1975. It inhabits only lowland peat forests which occur in Malaya in only small, isolated patches. In recent years, this habitat has been heavily logged, further reducing the bat's limited range.

• buff-headed marmoset (*Callithrix flaviceps*)—This small primate once occurred throughout the mountains of southeastern Brazil, but it currently survives in only reduced, fragmented populations. Formerly, the species was exploited for the pet trade and for biomedical research, but today the main threat is habitat destruction.

• Preuss's red colobus (*Colobus badius preussi*)—Today, this primate occurs only in the lowland evergreen forest of Cameroon. Its habitat has been degraded by logging, and it is commonly hunted as food.

• Vancouver Island marmot (*Marmota vancouverensis*)—This marmot occurs only in four areas of Vancouver Island, British Columbia, Canada. Its restricted habitat type—alpine and subalpine areas with steep slopes, talus debris, and open meadows—has been further reduced through development of ski resorts. Proposed developments would cause additional habitat damage, and logging is also having an adverse effect.

• Indus River dolphin (*Platanista indi*)—Entirely fresh-water in distribution, this cetacean is found only in a section of the Indus River and some of its tributaries in northern India. In former times, it was found throughout the Indus River system. The main threat to the species is aquatic habitat modification resulting from pollution and from large amounts of water being drawn for irrigation; hunting by humans for food is also a factor.

• African wild dog (*Lycaon pictus*)—Widely persecuted as a predator, this carnivore has been eliminated or reduced greatly in most parts of Africa. Although it receives some protection in scattered parks and reserves, elsewhere its habitat is being widely destroyed.

• giant panda (*Ailuropoda melanoleuca*)—The giant panda was once widely distributed over southern and eastern China, but massive habitat disruption eliminated the species from all but the most remote mountainous areas at an early date in Chinese history. Earthquakes are one danger; 138 pandas died in earthquakes in 1975 and 1976. Another current threat is the sudden dying-out of arrow bamboo, the panda's main food. This plant flowers only once every 60-100 years, then dies. Some years are required for the seeds to grow into stands sufficient to support a panda population. In former times, before the habitat became so restricted, pandas could forage more widely for food and could find other sources. The current concern is that the panda population is at such a low level that the bamboo die-off could bring about the species' extinction.

• Pakistan sand cat (*Felis margarita scheffeli*)—Although this cat has always been rare, exploitation for the live animal trade, and for the skin trade, led to a drastic decline between 1968-1972. Since that time, it has been extremely difficult to find this cat in the wild. Any illegal trade could prove fatal to its survival. Even though it is now protected from exportation by Pakistan, the cat's rarity and small range make it highly vulnerable. There are no reserves or known breeding groups in captivity.

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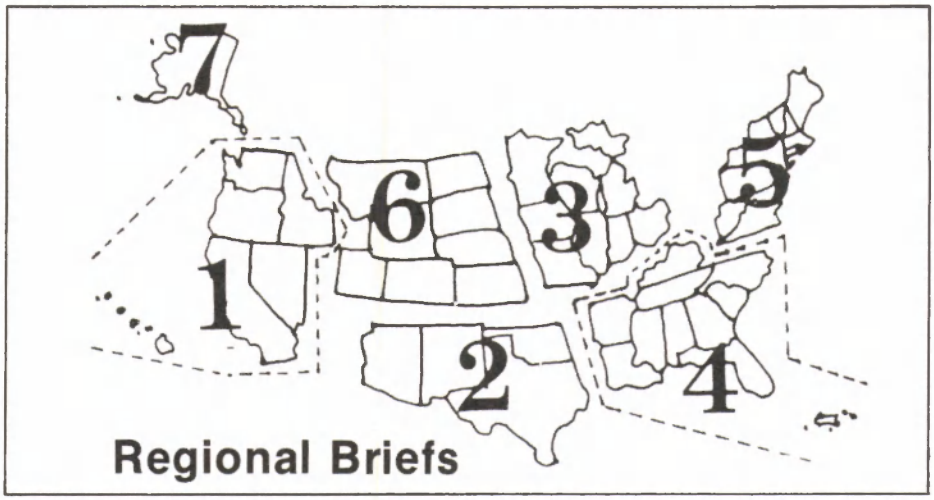
Photo by Kojo Tanaka/World Wildlife Fund

The giant panda is jeopardized by habitat disruption and the loss of its preferred food plant.



Regional Briefs

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

Region 1: During mid-January 1983, the California Department of Fish and Game (CDFG), in cooperation with the U.S. Fish and Wildlife Service (FWS) and the California Conservation Corps (CCC), initiated removal of exotic iceplant *(Carpobrotus* spp [= *Mesembryanthemum* spp.]) from the habitat of the Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*), a Federal and State listed endangered mammal. Crew members from the San Luis Obispo CCC office extracted an estimated 400+ cubic yards of iceplant from portions of the Morro Bay Ecological Reserve (a 50-acre area administered by CDFG to protect the kangaroo rat), and nearby Montana de Oro State Park. The iceplant removal is the first phase of a two-part program designed to restore habitat for the kangaroo rat.

Prior to and since acquisition of the State lands at Morro Bay, habitat conditions have deteriorated because the dune vegetation has become too dense. Although most of the remnant dune scrub vegetation occurring on State land is relatively natural (containing a high percentage of native species), the absence of fire, shifting sands, and/or other natural perturbations of the ecosystem have allowed the woody scrub vegetation to increase its coverage and density. As a result, Morro Bay kangaroo rats, which require relatively open habitat with small forbs and grasses, have slowly been eliminated. It is anticipated that removal of the iceplant, followed by selective removal of shrub vegetation, will provide appropriate habitat conditions for the kangaroo rats.

The Endangered Raptor Coordinator (ERC) of the Sacramento Endangered Species Office presented a paper on the American Peregrine Falcon Recovery Program at a conference on raptors at the California Academy of Sciences in San Francisco. The conference provided an excellent program on raptor conservation efforts. The ERC participated in a meeting of the California Raptor Research and Management Advisory Committee, where input was provided on the proposed Federal regulations to allow the sale of captive raised raptors. The Committee hopes that these regulations will provide a means for cost reimbursement to the captive breeder without creating a significant commercial trade in raptors.

On January 28, 24 light-footed clapper rails (*Rallus longirostris levipes*) were counted at Tijuana Slough, primarily adjacent to Imperial Beach Boulevard and Navy-owned land. The California least tern (*Sterna albifrons browni*) nesting enclosure south of the river mouth appears to have been swept clean of 90 percent of the debris which littered it last year. The terns prefer relatively clean sand with little or no vegetation.

A draft Conservation Agreement that addresses cooperative management for the Threatened Oregon silverspot butterfly (*Speyeria zerene hippolyta*) has been written. Cooperators include the U.S. Forest Service, The Nature Conservancy, Oregon Department of Transportation, and a private landowner.

In 1981, the Secretary of the Interior gave the Bureau of Reclamation the lead in reinitiating negotiations to settle Truckee-Carson water use conflicts. Representatives of the principal parties

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U.S. Fish and Wildlife Service
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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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Two Condor Chicks Hatched in Captivity

The first two California condor (*Gymnogyps californianus*) chicks to hatch in captivity have increased the hope that this critically Endangered species may yet be saved from extinction. Both chicks apparently are healthy and are responding to the special care they are receiving at the San Diego Wild Animal Park. The young birds were started on a gruel of water and finely chopped mice, which was later supplemented with regurgitated vulture food, similar to what they would have received from their natural parents. Zookeepers are feeding the chicks with hand puppets that resemble the heads of adult condors to keep the birds from imprinting on humans. The sex of the two condor chicks will not be known for several months, but biologists hope that they will someday be part of a captive breeding group that will produce offspring for release into the wild.

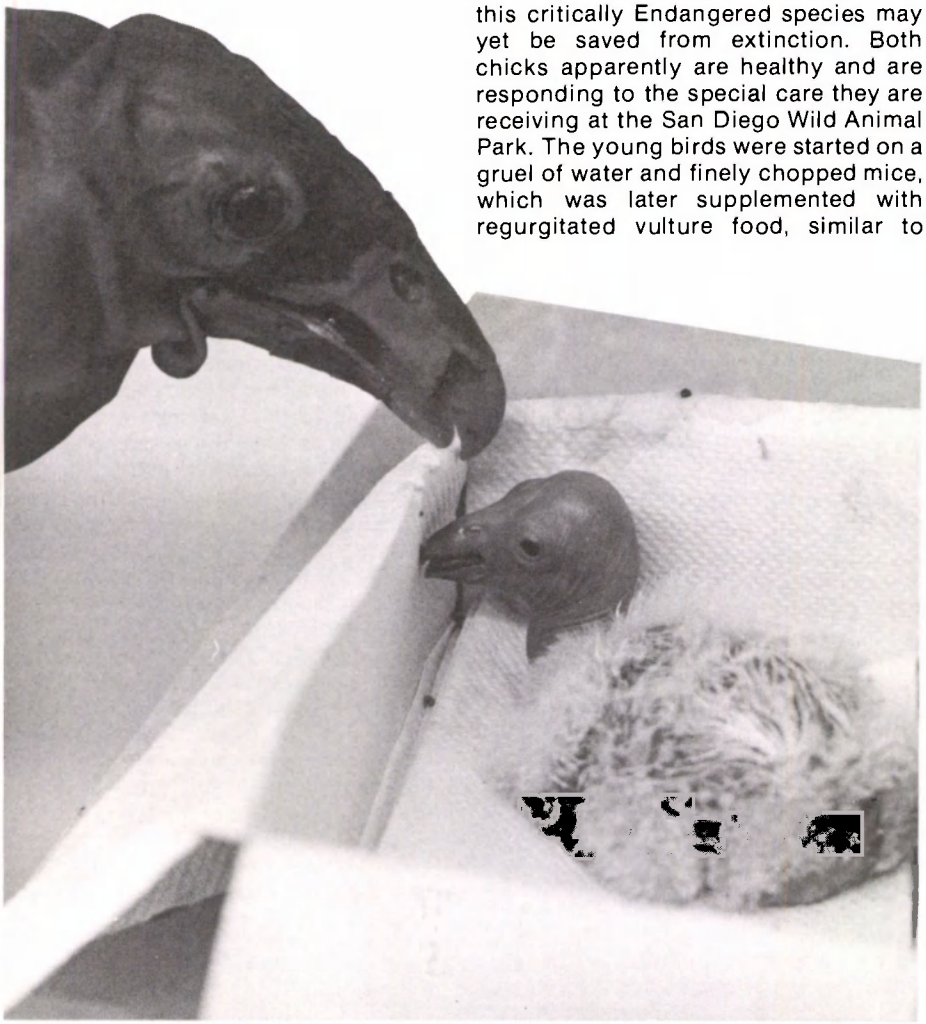

Photo by Ron Garrison/Zoological Society of San Diego

This California condor chick, which hatched recently at the San Diego zoo, is being cared for by zookeepers using hand puppets that resemble the chick's natural parents.

The chicks hatched from eggs taken from two of the five known condor nests in the wild. Intensive observation of paired condors during the past breeding season provided conclusive proof that condors will lay a replacement egg if their first egg is lost. The California Game and Fish Commission granted the joint FWS/National Audubon Society condor research team permission to take the first egg from all condor nests (see January 1983 BULLETIN). On February 2, the breeding pair that lost two eggs last year during squabbles over incubation rights produced its first egg of this season; the egg was taken on February 23 by team biologists and transported to an incubation chamber at the San Diego Zoo. The chick emerged from its shell on March 30. (Although the troubled condor pair produced a second egg, disputes like those that occurred last year again erupted, and researchers took the egg on April 8 for artificial incubation as a precaution. However, the improper incubation it received from its natural parents during early embryonic development has probably damaged the egg's chances of hatching.) A second egg taken on March 8 from a different pair hatched in captivity on April 5. Both chicks have been transferred from the San Diego Zoo to the zoo's Wild Animal Park where they will be raised in a quarantined area near other captive vultures.

The two immature male condors taken into captivity last year after their chances for survival in the wild had come into question are now doing well at the Los Angeles Zoo.

CITES NEWS — March 1983

The Endangered Species Act of 1973, as amended in 1979, designates the Secretary of the Interior as both the Management Authority and the Scientific Authority of the United States, for the purposes of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Management Authority responsibilities are delegated to the Associate Director—Federal Assistance; Scientific Authority responsibilities are delegated to the Associate Director—Research.

The Service's Wildlife Permit Office (WPO) functions as staff to the U.S. Management Authority for CITES, assuring that wildlife and plants are exported or imported in compliance with laws for their protection and issuing permits for legal trade of these species. The Service's Office of the Scientific Authority (OSA) functions as staff to the U.S. Scientific Authority for CITES. OSA reviews applications to export and import species protected under CITES, 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.

Foreign Proposals to Amend CITES Lists

Proposals to amend the CITES appendices submitted by Parties other than the United States were published by the Service (F.R. 3/7/83). U.S. proposals were announced earlier (F.R. 11/17/82 and F.R. 12/27/82), and featured in the December 1982 and January 1983 issues of the BULLETIN.

Besides listing the species proposed as subjects of amendments to the appendices, the March 7 notice also indicates the tentative negotiating positions of the U.S. delegation on the foreign proposals. Preliminary indications of support or opposition to the various

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Service Proposes Reclassification of Arctic Peregrine Falcon

The Arctic peregrine falcon (*Falco peregrinus tundrius*) has been proposed by the Service for reclassification from Endangered to Threatened (F.R. 3/1/83). Included in the proposal is a Similarity of Appearance provision that would identify all peregrines in the 48 conterminous States as Endangered, regardless of their subspecific identity, In order to facilitate enforcement of conservation rules for the listed forms.

Status of the Peregrine

Three subspecies of the peregrine falcon are found in North America: the American peregrine (*F. p. anatum*); the Arctic peregrine (*F. p. tundrius*); and the Peale's peregrine (*F. p. pealei*), which nests from the Aleutian Islands east and south to Vancouver Island. The American and Arctic subspecies were listed as Endangered in 1970 after the discovery that contamination of their food supply by DDT and its metabolites interfered with reproduction, causing sharp reductions in population levels and nesting ranges. Habitat loss and taking by humans for falconry did occur, but environmental contamination was the main threat.

With the subsequent decline in DDT usage in the U.S. and Canada, the reproductive rate of falcon populations in the Arctic have shown a gradual improvement over the past 5-6 years, and are no longer faced with imminent extinction. Although the use of DDT continues where many of these birds apparently winter, recent blood samples have shown that less than 10 percent of the adult female peregrines migrating into the Arctic each spring have contamination levels sufficient to reduce natural reproductive potential. Based on analyses of 430 blood samples from peregrines trapped during migration in the past 4 years, the other 90 percent should be capable of normal reproductive rates. These levels of contamination, while not threatening northern populations with extinction, do still pose a problem. Since the DDT contamination continues to occur and could even increase, the Service has not proposed the complete delisting of the Arctic peregrine at this time.

5-Year Review

Under the 1978 amendments to the Endangered Species Act, the status of all listed species must be reviewed at 5-year intervals to see if the classifications remain appropriate. Accordingly, the Service published in the May 21, 1979, *Federal Register* a Notice of Review on all species listed prior to 1975, including the two listed subspecies of North American peregrines. The March 1, 1983, proposed rule, however, is based on data received by the Service over the last several decades up until June 1982. After analysis of this information, the Service has concluded that *F. p. tundrius* is not now threatened with extinction throughout a significant portion of its range.

Effects of the Proposed Rule

As a Threatened species, *F. p. tundrius* and its habitat would continue to receive the protection authorized under the Endangered Species Act. Further, *all* peregrine falcons are covered under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the proposed rule would not affect the status of any peregrines under CITES. The Service has previously considered and rejected a petition to move *F. p. tundrius* to Appendix II. Existing Federal falconry regulations (50 CFR 21.28 and 21.29) would not be affected by the proposed rule, and no changes would be required in the regulations implementing the Migratory Bird Treaty Act.

The different subspecies of *Falco peregrinus* are difficult to distinguish, and they sometimes intergrade at the boundaries of their ranges. In the past, there has been debate about the taxonomic status of nesting peregrines along the Pacific Coast of the State of Washington: were they *F. p. pealei* (unlisted) or *F. p. anatum*? Therefore, the Service has also proposed to call all nesting peregrines in this area *F. p. anatum* for the purposes of the Act, thereby giving the birds and their habitat protection under both Sections 7 and 9. Further, the proposed rule would list *all* free flying peregrines in the 48 conterminous States, not otherwise identifiable as a listed subspecies, as Endangered under the Similarity of Appearance (S/A) clause of the Endangered Species Act. This is expected to make law enforcement more efficient, thereby increasing the protection to the listed peregrines. Under the S/A Endangered classification, all prohibitions on Endangered species would apply. Federal permits for prohibited activities could be approved only for 1) scientific research or 2) enhancement of propagation or survival of the species.

Public Comment Requested

The Service is requesting comments on the proposal from any interested agencies, organizations, and individuals. All comments should be submitted to the Director (OES), U.S. Fish and Wildlife Service, Washington, D.C. 20240 by May 31, 1983.

12 Mammals

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Effects of the Proposal

If the proposed rule becomes final, all prohibitions in 50 CFR 17.21 will apply, making it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale these species in interstate or foreign commerce. It would also be illegal to sell, deliver, carry, transport, or ship any such wildlife which was illegally taken.

Listing these mammals under the Endangered Species Act would benefit them in other ways. It would focus the world's attention on their status, and encourage the resident countries to develop conservation programs. The U.S. could be authorized to make its expertise available, upon request, in developing such programs. Funding for conservation purposes could also be made available under certain circumstances.

Request for Information

Data and comments on the proposal are requested from all interested persons, organizations, and agencies worldwide. They should be received by the Director (OES), U.S. Fish and Wildlife Service, Washington, D.C. 20240 by June 29, 1983.

Comment Period Reopened for Proposed Plant

The comment period for a proposal to list the San Francisco Peaks groundsel (*Senecio franciscanus*) as Threatened under the Endangered Species Act of 1973 and to determine its Critical Habitat has been reopened (F.R. 3/15/83). The plant was originally proposed for listing by the Service on November 22, 1982.

The Act, as amended, requires that a summary of any proposed listing regulation be published in a newspaper of general circulation in the areas in which the

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Check-off Dollars Bolster Minnesota's Nongame Program

by Carrol L. Henderson
Nongame Wildlife Supervisor
Minnesota Department of Natural Resources

In 1980, Minnesota initiated an income tax check-off program, designed to raise funds for nongame wildlife conservation. During that year, the State received $523,743.65—the largest amount received by any State in the first year of its program. Now, over 50 activities utilizing these funds are being conducted throughout the State.

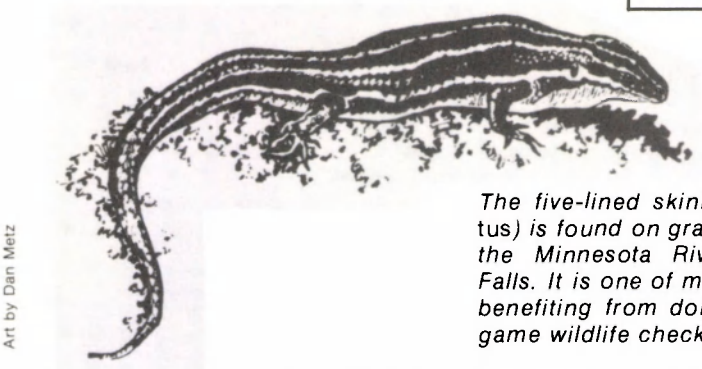
The enthusiasm of Minnesotans for nongame conservation continues to increase as they see their donations converted into projects for wildlife. In the second year of the check-off, the number of donations increased from 170,000 to 197,000, and the total funds contributed rose to $619,000.

Quite diverse projects have been made possible by the nongame check-off funding. Many surveys and studies on rare and uncommon nongame vertebrates have been accomplished through contracts with private individuals or with educational institutions; many other projects are being carried out by our own Nongame Wildlife Program staff members.

Since 1977, when our nongame program began, until last year, our staff consisted of one person. The check-off funds, however, have enabled the State Department of Natural Resources (DNR) to hire six new employees. These new staff people are stationed at four regional offices and at the Nongame Wildlife Program headquarters in St. Paul.

Art by Dan Metz

*The Endangered peregrine falcon (*Falco peregrinus anatum*) is being restored to Minnesota partially with donations to the nongame wildlife check-off. The Minnesota DNR is cooperating with other private and public organizations to help this important species.*



Art by Dan Metz

*The five-lined skink (*Eumeces fasciatus*) is found on granite outcrops along the Minnesota River near Redwood Falls. It is one of many wildlife species benefiting from donations to the nongame wildlife check-off.*

Wildlife Projects

The projects conducted under contract to educational institutions include a landmark study by biologists from the University of Minnesota in Duluth. This study concerned the status and ecology of piping plovers (*Charadrius melodus*) in Lake of the Woods. The 12 nests found by the University of Minnesota team last summer comprise the largest colony remaining in the Great Lakes Region. Encroachment by humans, pets and motorized recreational vehicles on the sandy beaches where the piping plover nests threaten its survival. Fortunately, the area occupied by plovers in Lake of the Woods has recently become protected through designation as a Scientific and Natural Area. The information gathered by the team will be invaluable for planning future protection of this species. The piping plover is being considered for Federal protection under the Endangered Species Act.

A research project by a biologist from the University of North Dakota at Grand Forks focused on a geographically isolated population of five-lined skinks (*Eumeces fasciatus*) along the Minnesota River valley in west-central Minnesota. These rare lizards only occur on granite outcrops. The project revealed that their specialized habitat is being slowly eliminated by encroachment of eastern red cedars on the outcrops. Control of the cedars may be necessary to preserve the skinks.

Other research projects investigated the effects of the size of aspen clearcuts on nongame birds, the feeding ecology of trumpeter swan cygnets (*Cygnus buccinator*), the behavioral ecology of bluejays (*Cyanocitta cristata*), and lead poisoning in bald eagles (*Haliaeetus leucocephalus*). The feasibility of placing great gray owl (*Strix nebulosa nebulosa*) nesting platforms in potential habitat to monitor the owl's population status was also studied. This spring, one pair of great gray owls has initiated nesting on one of the 24 platforms which were constructed. A survey of bats has also been started in southeastern Minnesota.

Many of the activities of the four regional nongame wildlife specialists who have been hired will involve habitat management work in coordination with County, State, and Federal natural resource managers and private citizens. Their responsibilities will also include wildlife surveys and educational efforts.

One of the specialists, for example, is working with plans developed by the Army Corps of Engineers to create a new dredge-spoil island in the Warroad harbor of Lake of the Woods. Landscaping of the island will be designed to accomodate nesting by common terns (*Sterna hirundo hirundo*), and piping plovers. Another specialist is coordinating efforts to bulldoze brush on the Hearding Island Wildlife Management Area (WMA) in the Duluth Harbor of Lake Superior. This work is also designed to create potential piping plover and common tern nesting habitat. This 37-acre island is the first WMA to be designated in Minnesota primarily for the benefit of nongame species. It is unique because it is also the only urban WMA in the State.

A novel approach for helping Eastern bluebirds (*Sialia sialis*) has been developed in cooperation with the Minnesota Department of Transportation (DOT). DOT and DNR employees have worked together to perfect a design whereby a large drill was used to create cavities in the tops of wooden fence posts along Interstate Highway rights-of-way. Our initial effort resulted in 9 bluebird pairs

and 70 tree swallow pairs in 93 posts.

Efforts are currently being completed to acquire 107-acre Shelley Island in Cotton Lake in Becker County. The island has a diversity of habitats and a history of use by nesting great blue herons (*Ardea herodias*), and red-necked grebes (*Podiceps grisegena*). The wildlife habitat value is increased by the presence of a 30-acre pond on the island and a sheltered bay containing wild rice. Indian burial sites also enhance the significance of the island. The Minnesota Chapter of The Nature Conservancy and the Minnesota Wildlife Heritage Foundation (MWHF) are cooperating in the preservation effort. The MWHF is raising $25,000 toward the purchase price of $75,000 and the Check-off Program is providing the balance.

Last summer, eight trumpeter swan eggs were obtained from the Lacreek National Wildlife Refuge in South Dakota and flown to incubator facilities at the DNR's Carlos Avery Wildlife Refuge. Five eggs were viable and hatched. The rearing of the five cygnets represents the first step in a project to reintroduce trumpeter swans to suitable habitat in outstate Minnesota. Additional releases are planned for the next 5 years.

Another exciting project last summer was the release of five peregrine falcon (*Faico peregrinus anatum*) chicks near Kellogg along the Mississippi River. This is a cooperative effort funded by donors of the Minnesota Chapter of The Nature Conservancy, the Peregrine Project of the Bell Museum of Natural History at the University of Minnesota, the U.S. Fish and Wildlife Service, and the Nongame Wildlife Check-off. Three chicks were successfully fledged, one was injured and will be released this year, and one was eaten by a great horned owl. Future plans call for up to 20 peregrine chicks to be released annually until the falcons are re-established on their historic nesting cliffs along the Mississippi River.

Department of Natural Resources Photo by Larry Dake

Pam Skoog, Regional Nongame Wildlife Specialist at Brainerd, Minnesota, is shown posting a "Loon Nesting Area" sign by the lake near Brainerd. She is one of four Regional Specialists recently hired to staff the Nongame Wildlife Program.

Information/Education Projects

New information and education efforts for the Nongame Wildlife Program included production of a semiannual newsletter called "The Blazing Star." The newsletter is jointly produced with the Scientific and Natural Areas Program and Natural Heritage Program in the Section of Wildlife. Recently 1,000 aluminum "Loon Nesting Area" signs were printed for posting at public accesses on lakes where loons nest. The signs advise boaters not to approach loon nests, not to approach loon families, and that loons are protected by law. A poster has also been printed for distribution to trappers that should help prevent bald eagles and other birds of prey from being accidentally trapped. The poster advises trappers that open-bait sets are illegal, and it tells them what to do if a bird of prey is accidentally caught. It also explains how to make an alternative trap set which does not attract birds of prey. A 30-second public service ad was also produced and distributed to radio stations in southwest Minnesota. It explained the importance of preserving roadside habitat.

A variety of administrative activities have occurred in the St. Paul DNR office which have had significant benefits for wildlife. Nongame staff members helped review a list of lands that were being made available free to the DNR by the Bureau of Land Management. Many of the parcels were islands with colonies of nongame birds like herring gulls and great blue herons. Other areas contained bald eagle nests. In all, over 1,055 parcels totaling more than 7,000 acres were transferred to the DNR in October 1982. Most will be administered as Wildlife Management Areas, and some will become Scientific and Natural Areas. The Nongame Program is also involved with development of a new list of State threatened and endangered species. The new list will be finalized in 1983 and will identify the wildlife species most in need of help through the Nongame Wildlife Program. Other activities have included data management for nongame distribution and abundance information, and review of environmental impact statements to minimize impacts of development projects on nongame wildlife.

Federal Cooperative Agreement

In 1979, Minnesota entered into a cooperative agreement with the Federal government under Section 6 of the Endangered Species Act of 1973. This agreement provides matching funds for endangered species conservation projects. This year, the State will receive $12,000 in matching funds for peregrine falcon work under this agreement. We will also receive additional Section 6 funds for timber wolf (*Canis lupus*) research.

Timber wolf management efforts are conducted by the Wildlife Section of DNR, but outside of the Nongame Wildlife Program. Minnesota wildlife law defines "game species" as animals either "traditionally or potentially harvested." Since the State has proposed a controlled harvest on the timber wolf, the wolf remains classified as a game species.

Comment Reopened

Continued from page 4

proposed species is believed to occur. Due to an inadvertant delay, this had not been accomplished by the end of the original comment period, January 21, 1983.

The Service will now promptly publish the newspaper notice and invite comments from any individuals that may be affected by the proposal. All comments must be received by May 16, 1983, the end of the second comment period. They should be sent to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103.

The San Francisco Peaks groundsel, a dwarf alpine plant, is known only from one small area in the mountains north of Flagstaff, Arizona. Its total known habitat is contained within the San Francisco Peaks region of Coconino National Forest.

Regional Briefs

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to ongoing litigation (Pyramid Lake Paiute Tribe, Truckee-Carson Irrigation District, Carson-Truckee Water Conservancy District, State of Nevada, and Sierra Pacific Power Company) held several meetings to resolve their conflicts. No settlement has been reached to date.

Overshadowing water use negotiations by the Bureau of Reclamation are the water needs of cui-ui (*Chasmistes cujus*) and Lahontan cutthroat trout (*Salmo clarki henshawi*). Before water use conflicts can be equitably resolved, the amount and timing of water needed to restore and maintain river and lake habitat for these fish must be identified. At the Bureau's request, we have identified the minimum information we must have to accurately predict the preferred flow regime for these fish. In addition, we identified funding/staffing requirements to collect and analyze this information.

The Lahontan Cutthroat Trout (LCT) Workshop was held in Reno, Nevada, on February 1-2, 1983. The purpose of the workshop was to initiate development of a management plan for the western range of LCT populations, including a detailed action plan and schedule. The participants discussed individual drainages and populations, and identified priority actions necessary to safeguard and enhance populations in those drainages.

The workshop evolved from a December 1981 meeting in which the attendees agreed to an appropriate approach on the LCT's legal status and its recovery under the Endangered Species Act. A recovery plan will be completed that will improve the status of the species to the point that it will no longer need protection under the Act. With the recovery elements identified, specific guidance will be provided by two separate management plans covering particular situations of the fish in two different parts of its current range. One plan being prepared by the Nevada Department of Wildlife (NDOW) will address recovery in the Humboldt River drainage; the other will encompass primarily the Truckee, Carson, and Walker River drainages and will be cooperatively prepared by the NDOW and California Department of Fish and Game. In the Humboldt drainage, recovery will be achieved when the management plan is written and all parties agree on an implementation plan. Recovery of the species in the remainder of its distribution will be realized when all programs in the other management plan are implemented and considered successful. Once recovery in one or both parts of the species' range is accomplished, the Service can propose to have appropriate populations delisted in accordance with provisions of the Endangered Species Act.

Region 2: Whooping cranes (*Grus americana*) are starting their annual migration northward. The world's population now stands at 114. Researchers will be radio-tracking up to three whooping cranes from the Wood Buffalo National Park-Aransas National Wildlife Refuge (NWR) flock. This will be the first spring migration so monitored. The previous fall radio-tracking effort has expanded our knowledge greatly. One item of note is that, in the past 24 months, four whooping cranes have died as a result of powerline collisions. Ida, a 1976 whooping crane of the Gray's Lake NWR-Bosque del Apache NWR flock died in mid-March after her wing was shattered, the result of a powerline strike in southern Colorado, and amputated. The bodies of two earlier powerline-killed whoopers were located because of their transmitters. The fourth was found along a roadside in Texas by a farmer.

The field survey of spotted bats (*Euderma maculatum*) is scheduled to start on May 1, 1983. This survey has been contracted to Dr. Brock Fenton, Carleton University, Ottawa, Canada. Dr. Fenton, Douglas Tenmount, and Joane Wyszecki will conduct the survey of 20 separate sites at 82 areas within 12 States and a Canadian province. The survey crew will begin work at Big Bend National Park, Texas, advancing northward through the Western States and into Canada, expecting to return to Ontario on September 5.

On March 22, 1983, a mated pair of red wolves (*Canis rufus*) was air-freighted to the Texas Zoo at Victoria, Texas. These are the first red wolves to be returned to Texas. There are now 44 animals in the Red Wolf Captive Breeding Program, which is centered at Tacoma, Washington. With the addition of those at the Texas Zoo, 12 red wolves are now distributed among 5 facilities, such as zoos and wolf sanctuaries, separate from the breeding station at Tacoma.

The final 1983 stocking of razorback sucker (*Xyrauchen texanus*) fry in Arizona waters was made on March 16, bringing the total release for this year to over 2.5 million fry. Another stocking of 100,000 4-6 inch fingerlings is planned for autumn. The razorback sucker restocking program demonstrates what can be accomplished when State and Federal people work together toward a common goal. It also indicates the tremendous potential for species with high reproductive rates in the capable hands of biologists like those at Dexter National Fish Hatchery. The Memorandum of Understanding with the State of Arizona calls for restocking of razorback suckers annually through 1990.

Region 3: Regional staff members met recently with representatives of the Wisconsin Department of Natural Resources and the National Park Service to initiate a project to determine why bald eagle (*Haliaeetus leucocephalus*) productivity at the Apostle Islands National Lakeshore (Lake Superior) is so low.

Region 4: The Asheville Endangered Species Field Office has begun a cooperative effort with the North Carolina Wildlife Resources Agency, the National Park Service, and the Tennessee Valley Authority to determine the incidence of great horned owls (*Bubo virginianus*) at potential peregrine falcon (*Falco peregrinus*) hacking sites. Present plans call for the hacking of some peregrines in 1984 and 1985.

Region 6: In February, the Montana Bald Eagle Working Group met in Missoula. The group (1) discussed the Pacific States Bald Eagle Recovery Plan, (2) reported that compilation of historic nest sites was going well, and (3) approved a proposed outline for Montana bald eagle management guidelines.

Representatives from the Service, Bureau of Land Management, Utah Division of Wildlife Resources, and the local community met in St. George, Utah, to discuss development of the Beaver Dam Slope Desert Tortoise Recovery Plan.

Several documents are being developed for the management and recovery of the black-footed ferret (*Mustela nigripes*). The Black-footed Ferret Recovery Team is revising the recovery plan, Region 6 is developing a strategy plan specific to the eight States within the Region, the Black-footed Ferret Advisory Team is preparing a management plan specific to the population near Meeteetse, Wyoming, and the Service's Division of Research is writing a Comprehensive Overall Research Plan that will outline the Service's approach to ferret research throughout its historic range.

The First Annual Report of the Windy Gap Fishes Study was published in January 1983. This work is in accordance with a Cooperative Agreement between the Service and Northern Colorado Water Conservancy District. Specific objectives of the work, which began in 1982, are (1) to locate and describe reproductive habitats for Colorado squawfish (*Ptychocheilus lucius*) and humpback chubs (*Gila cypha*) in the Grand Junction, Colorado, area, (2) to locate and quantify rearing areas for young Colorado squawfish and humpback chubs, (3) to identify the major factors that affect the survival of Colorado squawfish and humpback chubs during the first year of life, (4) to modify river backwaters and gravel pits, between Debeque Canyon and the mouth of the Green River, in a way that might enhance the survival of endangered fishes, (5) to evaluate natural and modi-

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Foreign Proposals

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fied river backwaters as habitat for proposals by the U.S. are based only on a review of information presented in the proposals in terms of criteria adopted by the Parties for the addition, deletion, or transfer of species in Appendices I and II. Final positions will be based on all available information and comments.

The following proposals, which are tentatively supported by the U.S. delegation, would transfer populations of Appendix I species to Appendix II in order to allow commercial international trade in ranched specimens: France's proposal to transfer the Tromelin and Europe islands population of *Chelonia mydas* (green sea turtle), Surinam's proposal to transfer the Surinam population of *Chelonia mydas*, Zimbabwe's proposal to transfer the Zimbabwe population of *Crocodylus niloticus* (Nile crocodile), and Australia's proposal to transfer *Crocodylus porosus* (saltwater crocodile). Ranching has been defined by the Parties to mean the rearing in a controlled environment of specimens taken from the wild. The Service also sought public comment on the ranching proposals by France and Surinam in relation to a special rule prohibiting the importation of maricultured green sea turtle products under the Endangered Species Act of 1973.

BOX SCORE OF LISTINGS/RECOVERY PLANS

Category	ENDANGERED U.S. Only	ENDANGERED U.S. & Foreign	ENDANGERED Foreign Only	THREATENED U.S. Only	THREATENED U.S. & Foreign	THREATENED Foreign Only	SPECIES* TOTAL	SPECIES HAVING PLANS
Mammals	15	18	223	3	0	22	281	18
Birds	52	14	144	3	0	0	213	28
Reptiles	8	6	55	8	4	0	81	6
Amphibians	5	0	8	3	0	0	16	2
Fishes	29	4	11	12	0	0	56	20
Snails	3	0	1	5	0	0	9	1
Clams	23	0	2	0	0	0	25	0
Crustaceans	2	0	0	1	0	0	3	1
Insects	7	0	0	4	2	0	13	3
Plants	55	2	0	9	1	2	69	7
TOTAL	199	44	444	48	7	24	766	86**

*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.
**More than one species may be covered by some plans.
Number of species currently proposed: 36 animals
6 plants
Number of Critical Habitats listed: 55
Number of Recovery Teams appointed: 69
Number of Recovery Plans approved: 80
Number of Cooperative Agreements signed with States:
38 fish & wildlife
11 plants

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Regional Briefs

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young Colorado squawfish and humpback chubs, and (6) to determine the extent that Colorado squawfish and humpback chubs move within the Colorado River and its tributaries. The report includes the findings from radio-telemetry work, larval and young-of-the-year surveys, and backwater and gravel pit investigations. One of the more interesting occurrences was the movement of an instrumented squawfish that was near Gypsum Canyon, Utah, in early July; by September, it was 200 miles upriver in Colorado. The study will continue in 1983.

Region 7: The release of 291 captive-raised and wild, captive-held Aleutian Canada geese (*Branta canadensis leucopareia*) on Agattu Island in August 1982 marked the end of the Service's 20-year captive propagation effort for this Endangered subspecies. Henceforth, efforts to reestablish breeding colonies will focus on transplanting wild adults and young from the Buldir Island breeding population. Although the Service is no longer propagating Aleutian geese for release into the wild, about 20 pairs have been placed on loan to zoos and private waterfowl breeders for display and propagation purposes. In 1982, these pairs produced 10 goslings. This growing captive flock is providing educational and scientific benefits as well as serving as a reservoir should they be needed for future release to the wild.

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