



# ENDANGERED SPECIES TECHNICAL BULLETIN

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

## SERVICE SETS GUIDELINES FOR RECOVERY PLANNING

Revised guidelines have been approved by the Service for the development and implementation of recovery plans, which are required under 1978 amendments to the Endangered Species Act. The guidelines also spell out the responsibilities and limitations of recovery teams, when it is necessary for one to be appointed to address the needs of individual species.

Under the 1978 amendments, a recovery plan must be developed for every listed Endangered and Threatened species, except when the Secretary determines that "such a plan will not promote the conservation of the species."

A recovery plan is a guide which recommends essential actions to secure or restore an Endangered or Threatened species as a self-sustaining member of its ecosystem. It provides the means for a coordinated effort between various agencies and organizations, generally aimed at reclassification of a species from Endangered to Threatened status, or a complete delisting. Although delisting is the ultimate goal of all recovery plans, immediate actions may be recommended to prevent a species' extinction.

### Recovery Plan Format

To insure continuity, the guidelines suggest a format that contains three parts and an appendix for each plan. The first part is an introduction, to include information on the species' habitat needs, current and historic range, population limiting factors, status, and conservation efforts.

The second part outlines the plan's objectives and subobjectives, and should be reviewed as new information is obtained.

Part three describes the implementation of the plan. Agency assignments, priorities, and estimated funding for the actions described in the second part are identified here. This third section must be updated annually to maintain a 3-year assignment and anticipated funding schedule.

Finally, the appendix carries appropriate documentation, maps, and letters of comment or concurrence from affected agencies and organizations.

The length of recovery plans will vary depending on the complexity of the issues at hand. The species' geo-

*Continued on page 3*

### Stamps Commemorate Endangered Flora

Four Endangered plants have been beautifully captured in a block of four 15-cent stamps to be issued June 7, at a convention of The Garden Club of America in Milwaukee.

All of the species being commemorated occur in extremely limited habitats. The persistent trillium (*Trillium persistens*), a member of the lily fam-

ily, is found only within a four-mile area of northern Georgia and South Carolina. Efforts are being made to propagate the species.

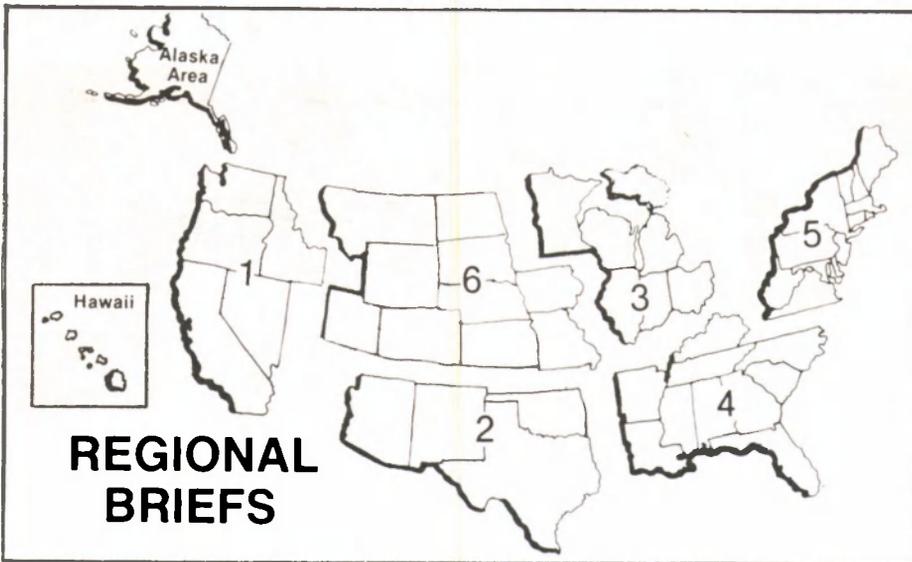
Existence of the Hawaiian wild broad-bean (*Vicia menziesii*) is regarded as precarious. This rare plant is thought to contain L-dopa, a chemical used in the treatment of Parkinson's disease.

Both the Contra Costa wallflower (*Erysimum capitatum* var. *angustatum*) and Antioch Dunes evening-primrose (*Oenothera deltooides* ssp. *howellii*) are found on the Antioch Dunes, which formerly covered about 500 acres on the south bank of the Sacramento-San Joaquin River in Contra Costa County, California. The dunes have been reduced by 90 percent due to agricultural and industrial activities.

Philatelists interested in obtaining first day cancellations may do so by buying the stamps at their own post offices and sending stamped, self-addressed envelopes with a remittance, preferably by personal check (no cash), of 15 cents for each stamp or 60 cents for each block to be affixed by the Postal Service. Send these to "Endangered Flora Stamps" at the same address. Requests must be post-marked no later than June 22.



Courtesy U.S. Postal Service



## REGIONAL BRIEFS

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

**Region 1.** Monitoring of the Cui-ui (*Chasmister cujus*) spawning population in Pyramid Lake (Nevada) has begun—an operation also intended to

provide brood stock for hatchery propagation. (About 60 adults have been collected.) The U.S. Geological Survey installed a staff gauge in the lower Truckee River, which allows better control of the fishway operation.

One additional subadult whooping

crane (*Grus americana*) was observed at the Grays Lake National Wildlife Refuge (Idaho) on April 30. It appears that all four young whoopers in this experimental flock (three from the 1975 transplant and one placed there in 1976) will summer at Grays Lake again this year.

Displays of Endangered Oregon plants were assembled by the Portland Regional Office and shown at the National Plant Society of Oregon's annual meeting as well as at the Native Plant Flower Show in Portland. Information packages containing county lists of Endangered and Threatened plants, with material on the Endangered Species Program, were also distributed. (Additionally, the region has completed its status survey of *Mirabilis macfarlanei*, an Oregon plant, which may soon be recommended for listing.)

**Region 2.** Nearly 250 woundfin (*Plagopterus argentissimus*) were collected from the Virgin River by the Woundfin Recovery Team, consultants, and area and regional office representatives. The fish were transported to Dexter National Fish Hatchery for propagation and eventual reintroduction within their historic range.

The Houston toad (*Bufo houstonensis*) spawned in the Houston Zoo for the second year. (The largest single concentration of breeding adults in the wild was located during April on private land in Bastrop County, Texas.)

No individuals were located in the latest U.S./Mexican attempts to live-capture Mexican gray wolves (*Canis lupus baileyi*) in Mexico for captive breeding in the U.S. to bolster recovery of this subspecies (see March 1979 BULLETIN).

Service biologists and field crew arrived at Rancho Nuevo, Mexico, to assist Mexican biologists and marines for the second year in their efforts to protect Kemp's ridley sea turtles (*Lepidochelys kempii*). All eggs laid have been transplanted to a central "corral," adult females have been tagged, and hatchlings are being escorted on their scurry to the Gulf. (Biologists will also conduct drift surveys, radio-track offshore females, survey aerially for additional nesting sites and distribution of offshore turtles, and collect 2,000 eggs for a reestablishment attempt on Padres Island National Seashore, Texas.) Of the 100 females tagged since they began nesting on April 13, fourteen wore tags from the previous year. Over 20,000 eggs were collected from 200 nests during April.

**Region 3.** Regional staffers are very pleased with cooperation received from Minnesota Air National Guard personnel for their efforts to protect nesting bald eagles (*Haliaeetus leuco-*

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#### 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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*cephalus*) in the Chippewa National Forest, in response to a Service inquiry, the Air Base agreed to modify future flight patterns through the re-routing of flights and/or the termination of flights during the birds' prime incubation period, and by flying at higher altitudes, precluding the possible disturbance of breeding eagles (and the need for formal Section 7 consultation).

The Northern States Bald Eagle Recovery Team met in Bangor, Maine, in April along with representatives from various Northeastern States and other Federal agencies. (Team members hope to have a recovery plan in draft form this Fall.)

Responsibility for the handling of livestock depredations by gray wolves (*Canis lupus*) in Minnesota has been transferred to the Service's Division of Research (under the direction of L. David Mech) in an effort to improve overall effectiveness of ongoing wolf research as well as control operations. Consideration is still being given to relocating depredating wolves to portions of their former range. In the meantime, full scientific use will be made of all wolf specimens taken. Efforts are also underway to minimize wolf damage and to monitor wolf numbers in the State.

**Region 4.** Cooperative extension services, fish and game agencies, and other interested agencies in Tennessee, Kentucky, and the Carolinas are cooperating with the Service in the publication of a booklet and development of a slide program for the general public on endangered species of the area. Extension education programs are expected to serve as the primary means through which this information will be conveyed.

A bald eagle chick, being transported from Ohio to Maine, was fed by regional staffers during a scheduled stop in Atlanta. The chick was produced by captive eagles at the Service's Patuxent Wildlife Research Center and unsuccessfully introduced to a nest in Ohio. Before continuing to Maine, where another introduction attempt will be made, the chick dined on diced catfish.

A 1978 survey of the sea turtle nesting area on the Cape Romain National Wildlife Refuge (South Carolina) revealed raccoon predation on nearly 100 percent of the turtle nests. With more than 2,000 loggerhead (*Caretta caretta*) nests annually, Capers Island is considered one of the most important nesting beaches known for this species. A trapping program initiated this spring has thus far removed 65 raccoons. Although the catch rate is now quite low, trapping will continue to determine if raccoons are migrating

to and from the island in response to the turtle nesting season.

An onsite inspection in late April revealed that a major portion of the North Carolina population of the proposed endangered plant *Sagittaria fasciculata* has been destroyed as the result of railroad right-of-way maintenance work.

**Region 5.** Bald eagle chicks raised at the Service's Patuxent Center were introduced into two nests in Maine and one nest in Pennsylvania. All of the chicks were adopted by the adult birds.

Field surveys for threatened and endangered plants have begun in New Jersey. (All 13 States in the Boston Region have now initiated studies on the status of their rare plants.)

**Region 6.** An agreement for the study of endangered fishes of the Colorado River has been signed by Interior's Bureau of Reclamation and the Fish and Wildlife Service. The agencies will cooperate in a 2-year effort to determine habitat requirements, monitor existing habitats, expand life history information, and gather biological data on the Endangered Colorado River squawfish (*Ptychocheilus lucius*) and humpback chub (*Gila cypha*). Field work will be done

primarily in the Upper Colorado River Basin by a study team to be organized by the Service, with the participation and cooperation of the Colorado Division of Wildlife and the Utah Division of Wildlife Resources. (A cooperative agreement was executed with Utah in April under Section 6 of the Endangered Species Act.)

**Alaska Area.** Preparations are underway for this summer's field efforts to band fledging peregrine falcons (*Falco peregrinus tundrius*) and to sample prey species for pesticide analysis. Four major nesting areas will be studied: Colville River, Porcupine River, Yukon River (lower and upper sections). The studies will be performed through contracts with raptor biologists as well as by Service biologists.

Aleutian Canada geese (*Branta canadensis leucopareia*) have begun the spring migration from their wintering grounds in California to the Aleutian Islands. Summer field activities on the Aleutian Islands National Wildlife Refuge will include a nesting survey of the wild population on Buldir Island, propagation operations on Amchitka Island, and release efforts on Agattu Island.

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## RECOVERY PLANNING

*Continued from page 1*

graphic distribution, and the number of agencies, organizations, or individuals involved, are all factors in determining the length of a recovery plan. The plan can be relatively simple, providing only for habitat protection and management, or it can be extraordinarily complex, such as the multi-faceted approach to saving the critically Endangered California condor.

### Abbreviated Plans

Occasionally, an advanced abbreviated plan may be developed for implementing immediate actions to prevent the extinction of a species. Such is the case with the leatherback sea turtle (*Dermodochelys coriacea*) which faces an immediate threat from illegal egg poaching and development of hotels and condominiums on a major nesting area in the Virgin Islands. During the 1977 nesting season, 86 leatherback nests were discovered on a narrow strip of Sandy Point Beach, St. Croix, and the Service designated the area as Critical Habitat (F.R. 9/26/78).

The Service has since prepared a 3-page abbreviated plan calling for the acquisition of Sandy Point Beach to protect the leatherback's nesting area. The plan was approved by the Endangered Species Program Manager. (The National Marine Fisheries Service, in cooperation and consultation with our Service's Atlanta Regional Office, recently appointed a recovery team to develop a comprehensive plan for the recovery and management of all six listed marine turtles, including the leatherback.)

Abbreviated plans must go through the same channels for approval as the more lengthy plans. It is therefore recommended to plan developers that the use of abbreviated plans be the exception rather than the rule.

### Plan Preparation

A recovery plan can be developed either by a recovery team, an assigned agency, institution, or conservation organization, or an individual who is knowledgeable in a particular species. In the latter case, the individual's services may be obtained on a voluntary or contractual basis, with the plan being assigned to an agency for coordination.

The method of plan preparation is generally selected by the appropriate

*Continued on page 4*

# RECOVERY PLANNING

Continued from page 3

regional director based on the species' range (limited vs. extensive), complexity of anticipated recovery efforts, number of organizations involved, availability of personnel, and expertise of available personnel.

An example of a recovery plan to be prepared without the appointment of a recovery team is the one for the grizzly bear (*Ursus arctos horribilus*), which will be drafted by a specialist hired by the Service for that purpose. Also, the Portland Regional Office has drafted a unique plan for three species in the Antioch Dunes area of Contra Costa County, California—Lange's metalmark butterfly (*Apodemia mormo langei*), Contra Costa wallflower (*Erysimum capitatum* var. *angustum*), and the Antioch Dunes evening-primrose (*Oenothera deltoides* ssp. *howellii*). The Antioch Dunes Recovery Plan (a suggested working title) is, more or less, a plan designed to stabilize this delicate ecosystem. (Normally, a multi-species recovery plan involves species which are close taxonomically, such as Hawaiian waterbirds or marine turtles, or have similar needs.)

## Recovery Teams

in many cases, it is necessary for the Service to appoint recovery teams

### Correction

In our discussion of bald eagle recovery on page 3 of the April 1979 issue, the third paragraph should have read:

William Clark, Director of the National Wildlife Federation's Raptor Information Center, who also attended the conference, cited a study showing evidence that color marking may have an adverse effect on the breeding success of raptors. Following the visual marking of six adult golden eagles (*Aquila chrysaetos*), representing five territories in Wyoming/Montana and Idaho, observations revealed only one apparent breeding attempt, with no eggs incubated. (All marked eagles have since left their previously active nesting territories.) These preliminary findings (soon to be published) indicate that a change in overall appearance may break the pair bond.

to develop plans. The teams consist of three to seven people, usually State and Federal Government employees and professionals from the academic or conservation communities. Team members and leaders (one for each team) are, in most cases, nominated by the regional director in consultation with the States, involved organizations, and the Office of Endangered Species. Final decisions on selection, appointment, removal, and replacement are made by the Service Director.

Team members are selected based on their agency's or organization's responsibilities for the species, expertise with respect to the species, and knowledge of the agency's responsibilities and capabilities.

The guidelines contain a list of do's and don'ts for recovery teams. A recovery team does:

- Draft a recovery plan for a species based on all available biological information.

- Seek technical input for the plan from acknowledged experts by distributing technical review drafts, if necessary. (Technical review drafts represent the team's concepts and views and do not necessarily represent the views of the Fish and Wildlife Service or any other agency. As with approved plans, drafts are subject to change.)

- Send technical review draft to regional director.

- As requested by the regional director, assist in coordinating implementation of the approved plan.

- Alert the regional director to any emergencies affecting the species, even before plan preparation or approval.

- Provide assistance, as requested, to the Director or regional director in determining ecological or other biological responsibilities of the Service toward the species.

- Assist other agencies with ecological or other biological matters involving the species, as requested and in consultation with the regional director. (This may be done only if the team is willing to do so, in which case its assistance represents team members' views, and not the views of their agencies.)

- Keep interested parties informed of its activities through team minutes or by inviting observers to team meetings, as advisable.

Recovery teams do not:

- Distribute draft plans for other than technical input.

- implement recovery actions.

- Consult with anyone on socioeconomic, political, or administrative issues involving recovery of the species.

- Determine Critical Habitat. The team may volunteer guidance on essential habitat or be requested to recommend Critical Habitat designations to the Service.

- Inform a party that its actions may have an adverse impact on a species or its habitat. (This is the responsibility of the Secretary of the Interior as stated in Section 7 of the Endangered Species Act.)

- Act through the news media, conservation organizations, State or Federal legislators, or other parties to influence agency decisions, or in any way act as a pressure group for a particular point of view.

Minutes of team meetings are to be kept and distributed to cooperating parties, agencies, and affected States. It is important to maintain a free flow of information and ideas to and from the team. Anyone should feel free to express their thoughts on the recovery of a species to a team leader or member.

## Priority System

While the Service, as far as practicable, aims to plan for the recovery of all listed species, a draft system has been developed to rank species for purposes of listing and recovery. The listing priority is based on three factors—an estimate of the degree of threat, the current availability of sufficient information to complete a rule-making, and the taxonomic status. The recovery priority system is structured in the same way, except that it includes recovery potential of the taxon instead of availability of rulemaking information.

These factors are based on three assumptions:

(1) The first step in saving any species is to prevent its extinction. Thus, the species with the highest degree of threat has the highest priority for listing and recovery. A species can be put in either a high, medium, or low category, which represents the degree of threat. The high category means extinction is almost certain in the immediate future because of a rapid population decline or habitat destruction. Medium means the species will not face extinction if listing and recovery are temporarily held off, although there is a continual population decline or threat to habitat. A species in the low category is rare, or is facing a population decline which may be a short-term, self-correcting fluctuation, or the impacts of threats to the species' habitat are not fully known.

(2) Within the above categories, resources should be used in the most cost-effective manner. Priority for recovery efforts will go to species and



Photo by J.A. Powell

*Lange's metalmark butterfly is one target of a multi-species recovery plan being developed for the Antioch Dunes area in California.*

projects with the greatest potential for success. Recovery potential is based on how well biological and ecological limiting factors and threats to the species' existence are understood, and how much management is needed. Every "high threat" species will receive at least the minimum efforts which will stabilize its status. After this has been accomplished, the remainder of the recovery work needed to achieve reclassification or delisting will be evaluated under the same recovery potential criteria.

(3) Taxa which are most genetically distinct should receive priority within any given category of degree of threat. Full species will be given priority over subspecies or populations.

Examples of high priority species (again, based on degree of threat, recovery potential of the taxon, and taxonomic status) are: Puerto Rican parrot (*Amazon vittata*), snail darter (*Percina tanasi*), Socorro isopod (*Exosphaeroma thermophilus*), and Hawaiian wild broad-bean (*Vicia menziesii*). Among the species to receive medium priority are: San Joaquin kit fox (*Vulpes macrotis mutica*), Kirtland's warbler (*Dendroica kirtlandii*), Arizona trout (*Salmo apache*), and American alligator (*Alligator mississippiensis*). Some of the low priority species are: southern sea otter (*Enhydra lutris nereis*), red-cockaded woodpecker,

*Picoides (=Dendrocopos) borealis*, Okaloosa darter (*Etheostoma okaloosae*), Red Hills salamander (*Phaeognathus hubrichti*), and Rydberg milk-vetch (*Astragalus perianus*).

#### State Recovery Programs

As an alternative to the procedures described thus far, recovery plans may be designed and implemented by a State, subject to Service review and the Director's approval, under certain conditions. The species to be recovered must reside entirely within the State, and the State must qualify under the Endangered Species Act to "conserve" the species and to "take the lead" for its recovery.

A State would qualify if it has entered into a cooperative agreement with the Service, or if it expresses (in writing) its desire, to the appropriate regional director, to conduct a recovery program for a species. The letter should also show that the State recognizes the overall responsibility of the Service toward the species and that the State has the authority to carry out a conservation program for the species.

If State action does not occur within a 1-year period or is unsatisfactory, coordination of the recovery effort will revert to the Service.

State recovery programs may or may not involve the use of recovery teams.

The State may select any method to implement its program and exercise complete control over it. It is the Service's responsibility under the Act to periodically review the State's program and take any necessary corrective actions.

#### Finalized Recovery Plans

To date, 22 recovery plans have been approved by the Service and another 28 are in the final review stages. They have all gone through a similar process: a draft is first prepared, then sent by the team to appropriate individuals for input on biological or ecological factors affecting the species (technical review draft); it is then reviewed by the regional office for biological, economic, and sociological adequacy and, upon a satisfactory finding by the regional director, is sent to all cooperating organizations for review of suggested actions relating to their responsibilities (agency review draft). The final step is approval by the Service Director.

Approved recovery plans are discussed in some detail in the BULLETIN. Those requiring more information on specific plans may obtain copies of approved plans from the Fish and Wildlife Reference Service, 3840 York Street, Unit I, Denver, Colorado 80205.

# Rulemaking Actions

April 1979

## CHAPMAN RHODODENDRON ENDANGERED

A rare rhododendron, known from only three locations in Florida, has been listed by the Service as an Endangered species (F.R. 4/24/79).

*Rhododendron chapmanii*—a member of the heath family (*Ericaceae*), was first recommended for Federal protection in the Smithsonian Institution's report to Congress (published as a petition, F.R. 7/1/75). This rhododendron was proposed for Endangered status in a subsequent notice (F.R. 6/16/76), where it was referred to as *Rhododendron minus* var. *chapmanii*, based on a 1962 study which reduced it to infra-specific rank. (A consensus of more recent biological opinion recognizes the Florida plant as a full, distinct species, and it has been so classified on the Federal list.)

This evergreen shrub can now be found in its natural habitat only in Florida's Clay and Gulf Counties, and on the Gadsden-Liberty County line. Less than 50 specimens are known from Clay County, where the population occurs within a National Guard installation. (The remaining plants occur on private lands owned by a paper company, where habitat destruction may continue to result from mechanical site preparation techniques and from drainage of the species' habitat to increase pine production. Although one area has been reserved to protect the rhododendron, the Gadsden-Liberty Counties population has already been reduced in size due to logging activities.

Overcollection of this appealing horticultural plant is also a threat to the species' continued existence. Once a population is discovered, all plants have been known to be removed. For this reason, Critical Habitat was not designated for the Chapman rhododendron, as detailed information on its location would likely make it even more vulnerable to collecting. (Although Florida law now limits taking of the plant, the Endangered Species Act does not prohibit the taking of Endangered plants.)



Photo by E. Laverne Smith

*Habitat destruction and overcollection have endangered Rhododendron chapmanii.*

## BOLSON TORTOISE LISTED AS ENDANGERED

To give additional protection to this declining Mexican species, the Service has listed the Bolson tortoise (*Gopherus flavomarginatus*) as Endangered (F.R. 4/17/79).

As noted in the Service's September 26, 1978, proposal (see November 1978 BULLETIN), several factors threaten this largest of North American land reptiles. Increased plowing and irrigation throughout the species' range in the Mexican States of Chihuahua, Coahuila, and Durango are major threats which could accelerate extinction of the tortoise. (Irrigation has also encouraged increased grazing by cattle and goats, destroying browse as well as the tortoise's burrows and cover sites.)

Hunting of this large reptile (adults have measured more than a yard in length) has also contributed to its decline, as has overcollecting by private individuals, zoos, and museums.

The Bolson tortoise is also protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Parties to this treaty recently voted to move the tortoise to the more restrictive Appendix I (see April 1979 BULLETIN), where its international trade will be strictly limited.

Both the Bolson and desert tortoise (*Gopherus agassizii*) will likely be the subjects of research in the coming year under the U.S.-Mexico cooperative agreement. Studies are needed to determine population parameters of these species in Mexico, to assess trends and changes due to man's activities, and to determine the species' habitat needs in order to make sound management recommendations.

(Critical Habitat was not considered for this species, which does not occur within the territorial boundaries of the United States.)

# RECOVERY OUTLINED FOR DUSKY SEASIDE SPARROW

The dusky seaside sparrow (*Ammospiza maritima nigrescens*), one of North America's rarest birds, will hopefully benefit from a recovery plan approved by the Service in April. The dusky's current distribution is restricted to the cordgrass marshes along the St. John's River in east-central Florida. According to the plan, this narrow distribution will limit the bird's recovery to the St. Johns marshes and Merritt Island, where the dusky's numbered as many as 4,000 prior to the 1950's. (The species no longer exists on Merritt Island.)

The primary reason for the extirpation of the dusky from Merritt Island has been the diking of marshes for mosquito control. Mosquito impoundments have destroyed areas of cordgrass, saltgrass, saltwort, and rush, which provide suitable habitat for the dusky. (Subsequently, the Service entered into an agreement with the National Aeronautics and Space Administration for management rights to Merritt Island.)

Habitat destruction has occurred along the St. Johns because of drainage, housing developments, conversion of marsh to improved pasture, and highway construction. Also, ranchers burn cordgrass annually for cattle grazing purposes. These ranch fires frequently become wildfires that spread through the dusky's range. According to the plan, "these birds are sedentary and have narrow habitat preferences," and higher mortality rates could therefore result because of displacement by wildfires if suitable habitat is not close by. These factors have reduced the St. Johns population from an estimated 894 singing males in 1968, to 12 counted this year. No females have been seen in the last three years. (The males sing to indicate to one another that they have established their own territory. Because they are easy to spot, singing males provide a reliable method for making population estimates.)

To meet its prime objective of restoring the species to a point where it no longer faces extinction, the Dusky Seaside Sparrow Recovery Plan recommends maintenance and development of existing and potential habitat. The plan calls for "management rights on sufficient land to serve as permanent, secure refuge." Specifically, the plan suggests the completion of the St. Johns National Wildlife Refuge acquisition to help insure the species' recovery. The plan also calls for

development of captive propagation techniques to bring the dusky back from its critically low population level.

Knowledge about the dusky's basic life history is limited. The plan outlines the need to determine the bird's food and habitat requirements as well as the optimum carrying capacity of specific sites. Other jobs mentioned

in the plan include converting selected impoundment areas on Merritt Island back to natural marsh and conducting transplants as needed (initially transplanting dusky's from the St. Johns to Merritt Island).

The recovery plan was prepared by the Service-appointed Dusky Seaside Sparrow Recovery Team. Serving on the team are: Dr. James L. Baker, Leader, U.S. Fish and Wildlife Service; Dr. Herbert W. Kale, III, Florida Audubon Society; and Lovett E. Williams, Florida Game and Fresh Water Fish Commission.

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## CLARIFICATION OF CONVENTION DECISIONS

In response to comments on our article about Convention actions in the April 1979 BULLETIN, we wish to clarify the record on two significant procedural actions (both on page 4, second column). The decision by the Parties to annotate species not observed for 50 years as "p.e." (possibly extinct) was based on a suggestion by Bill Clark, Vice President of Friends of Animals, Inc. Australia had raised the issue by stating that it may be inappropriate to regard species not recorded during some standardized period of time as extinct, but that there should be some way of immediately reinstating them in the appendices if they are rediscovered.

With regard to the listing of subspecies, the brief summary in the BULLETIN is best clarified by reprint-

ing the text of the recommendation adopted by the Parties: "The Convention recommends (a) that a subspecies should be proposed for inclusion in the appendices only if it is a valid taxon; (b) that where there are identification difficulties, the problem should be approached by including the entire species in Appendix I or Appendix II, where inclusion in Appendix III is inappropriate; (c) that proposals for doing so should indicate for the record which subspecies were considered to be under actual or potential threat, and which were proposed to be included because of the need to effectively control trade in other species or subspecies; (d) that the Secretariat request the Parties to volunteer experts to consider, in accordance with points (a)-(c) above, the subspecies remaining on the appendices with a view in each case to recommend the Parties to act on the issue not later than at the third meeting of the Conference of the Parties."

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## ENDANGERED SPECIES SCIENTIFIC AUTHORITY

### Notices—April 1979

*Composed of representatives from seven Federal agencies, the Endangered Species Scientific Authority (ESSA) was established by Executive order to insure the scientific soundness of governmental decisions concerning trade in endangered species of animals and plants. As the U.S. Scientific Authority for the Convention on International Trade in Endangered Species of Wild Fauna and Flora, ESSA reviews applications to export and import species protected under the Convention, reviews the status of wild animals and plants impacted by*

*trade, monitors their trade, makes certain findings concerning housing and care of protected specimens, and advises on trade controls.*

### ESSA Readying Procedures/Findings for 1979-80

In line with its responsibility to insure that export of U.S. species listed under the Convention's Appendix II will not be detrimental to their continued survival, ESSA is developing policies and procedures and gathering data on which to base findings during 1979-80.

Seven species are now the subjects  
*Continued on page 8*

# Scientific Authority

Continued from page 7

of special review by ESSA: the American alligator (*Alligator mississippiensis*), moved to the less restrictive Appendix II at the second meeting of CITES parties this past March (see April 1979 BULLETIN), bobcat (*Lynx rufus*), lynx (*Lynx canadensis*), river otter (*Lutra canadensis*), Alaskan brown bear (*Ursus arctos*), Alaskan gray wolf (*Canis lupus*), and American ginseng (*Panax quinquefolius*).

In its advance notice (F.R. 4/30/79), ESSA notes that Appendix II may include, under Article II 2(a), "all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival."

Under Article II 2(b), Appendix II may also include "other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control."

In order to find in favor of export, ESSA must address (for species under 2(a) above) the potential effect of exports on the listed species itself (to insure that such export will not be detrimental to the continued survival of the species in the wild). For species listed under 2(b), ESSA must address how such exports may affect the status of species included in Appendix II under Article II 2(a), or included in Appendix I.

For species listed under the provisions of Article II 2(b)—such as the Alaskan brown bear and Alaskan gray

## BOX SCORE OF SPECIES LISTINGS

Category	Number of Endangered Species			Number of Threatened Species		
	U.S.	Foreign	Total	U.S.	Foreign	Total
Mammals	33	227	260	3	18	21
Birds	67	144	211	3		3
Reptiles	11	48	59	10		10
Amphibians	5	9	14	2		2
Fishes	29	10	39	12		12
Snails	2	1	3	5		5
Clams	23	2	25			
Crustaceans	1		1			
Insects	6		6	2		2
Plants	21		21	2		2
<b>Total</b>	<b>198</b>	<b>441</b>	<b>639</b>	<b>39</b>	<b>18</b>	<b>57</b>

Number of species currently proposed: 158 animals  
1,850 plants (approx.)

Number of Critical Habitats listed: 34  
Number of Recovery Teams appointed: 66  
Number of Recovery Plans approved: 22  
Number of Cooperative Agreements signed with States: 23

April 30, 1979

wolf—ESSA will only consider the potential impact of their export on other populations of the same species. For species such as American ginseng, where the purpose of listing was not referenced, ESSA will treat the species as included under the provisions of Article II 2(a), and will therefore address the impact of trade on the species itself.

However, for the river otter, bobcat, lynx, and alligator, for which the purpose for listing is either specifically referenced as under 2(a) or (b), or when the purpose is unclear but implies the need for trade monitoring, ESSA intends to base findings on the potential effects of trade on their own

survival as well as on other species in the taxa (a departure from last year's policy).

Although guidelines have not yet been developed on which to base export findings under 2(b), criteria will likely be based on the ability to distinguish specimens from associated species, and so may prescribe specific conditions (such as tagging or marking) to support a finding of no detriment. (ESSA intends to publish proposed procedures along with its proposed findings for appropriate species for 1979-80 in the *Federal Register* over the next couple of months, with ample time provided for public comment.)



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Int 423

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