REGIONAL NEWS & RECOVERY UPDATES



Regional endangered species staffers have reported the following news:

Region 1

Conboy Lake National Wildlife Refuge The U.S. Fish and Wildlife Service has received approval to expand the Conboy Lake National Wildlife Refuge (NWR) in southern Washington state by 40 acres (16 hectares) to encompass the Gamble Tract. Addition of the Gamble Tract will protect habitat for sandhill cranes (*Grus canadensis*), which are considered by the state of Washington as endangered, and Oregon spotted frogs (*Rana pretiosa*), a species also considered endangered in Washington and a candidate for federal listing, as well as migratory birds and other wildlife.



Sandhill crane USFWS photo

The Gamble Tract is adjacent to two active sandhill crane nesting territories and one of the largest Oregon spotted frog breeding sites on the refuge. It contains historic wetlands that could be restored to provide important habitat for sandhill crane nesting and foraging as well as Oregon spotted frog breeding habitat.

Approximately one-third of the tract is timbered with ponderosa pine, lodgepole pine, and Douglas

fir; the rest is Camas prairie. The land is routinely used by elk, many small mammals, and birds. Geese use the open grass areas during spring migration.



California condor USFWS photo

California Condor *(Gymnogyps californianus)* The Hopper Mountain NWR and adjacent Sespe Condor Sanctuary in the Los Padres National Forest of eastern Ventura County in southern California continues to be the area of focus for reintroduced California condors. Biologists are continuing a supplemental feeding program on the refuge and monitoring condor activities closely.

Due to continuing problems of low flying aircraft over Hopper Mountain NWR and the Sespe Condor Sanctuary, notices for pilots were posted at Oxnard, Camarillo, and Santa Paula airports. The notices reminded pilots to maintain a 3,000-foot (915-meter) terrain clearance when flying over or near the Sespe and Sisquoc condor sanctuaries. Information regarding this requirement will also be published in the Ventura County's Department of Airports newsletter.

Reported by LaRee Brosseau of the Service's Portland Regional Office.

Region Two

Rio Grande Silvery Minnow (Hybognathus *amarus*) The Rio Grande silvery minnow has been the focus of intensive interagency negotiations and recovery planning lately, as a newly developed multi-stakeholder program comprising public and private entities collaborates with the Service in its recovery activities for the critically endangered fish. Once an abundant species found throughout the Rio Grande basin and its tributaries, the silvery minnow has suffered from habitat loss and alteration due to water diversion for agricultural irrigation. The silvery minnow is currently found only in the middle Rio Grande from Cochiti Dam to the headwaters of the Elephant Butte Dam in New Mexico, a stretch of the Rio Grande that represents approximately five percent of the minnow's historic habitat. (See related article in this edition of the *Bulletin*.)

The multi-stakeholder team will focus on several recovery issues related to habitat loss and alteration, including identification and implementation of channel restoration activities, water quality improvements, and long-term water management strategies. Additionally, captive propagation and reintroduction programs for the silvery minnow will be continued and augmented at Service, state, and local facilities.

Gila Trout *(Oncorbynchus gilae)* The Gila trout, a fish native to the rivers of the southwestern United States, is being considered for reclassification from endangered to the less critical category of threatened. When the trout was initially listed in 1966, it existed in only five small populations. Recovery work over the past three decades has included captive propagation from these relict populations and reintroduction of fish into historic stream habitat in New Mexico and Arizona. Less than 10,000 in 1992, the population in 1998 was estimated at 37,000 and is considered stable.

To ensure the success of reintroduced Gila trout, recovery work has focused on the causes of the original decline: habitat fragmentation and alteration (including streamside vegetation loss and erosion, sedimentation, and lowered water tables)



Gila trout USFWS photo

and competition and interbreeding with non-native trout. Planning is underway with the New Mexico Department of Game and Fish and the U.S. Forest Service for a large-scale habitat restoration project on the West Fork Gila River. Completion of the project will double the number of stream kilometers available for occupation by Gila trout.

A revised recovery plan, which outlines recent conservation efforts, reports new biological data, refines reclassification criteria, and proposes delisting criteria, should be available for public review soon.

Texas Plants The Service has been working with the Stephen F. Austin State University (SFASU) and the Texas Nature Conservancy to establish populations of several federally listed and candidate species within the recently established Pineywoods Native Plant Center at SFASU. As an anticipated accredited partner of the Center for Plant Conservation, the Pineywoods Center will house seeds and populations of two listed species (Texas trailing phlox, *Pblox nivalis* ssp. *texensis*, and the white bladderpod, *Lesquerella texensis*), two listing candidates (Texas golden gladecress, Leavenworthia texana, and Neches River rosemallow, Hibiscus dasycalyx), and a number of additional plant species of concern. These populations will be used for research purposes and for reintroduction efforts within suitable habitat in East Texas.

Reported by Tracy A. Scheffler and Jim Brooks, of the Service's Albuquerque Regional Office and Kathy Nemec of our Clear Lake, Texas, Field Office.

Region 5

West Virginia Species The Service's West Virginia Field Office has updated the 1990 recovery plan covering the two endangered Appalachian subspecies of northern flying squirrels. The updated plan amends the guidelines for habitat identification and management for the endangered Virginia northern flying squirrel *(Glaucomys sabrinus fuscus)* in West Virginia. The amendment was a collaborative effort between the Service, Monongahela National Forest, George Washington/Jefferson National Forest, West Virginia Division of Natural Resources, and Appalachian Northern Flying Squirrels Recovery Team.

The new guidelines will provide better management for the northern flying squirrel in West Virginia and expedite its recovery. Promulgation of the amended guidelines into the management plans of the Monongahela National Forest, which supports almost all of the squirrel's populations, will in all likelihood result in reclassification of the northern flying squirrel to a threatened and possibly a delisted species.

West Virginia has been awarded two grants totaling approximately \$250,000 to determine baseline population levels and habitat conditions in the state for the Virginia northern flying squirrel, Cheat Mountain salamander *(Pletbodon nettingi)*, and flat-spired three-toothed land snail *(Triodopsis platysayoides)*. The information will be used to assist in development of a Habitat Conservation Plan (HCP) with the Intrawest Corporation at Snowshoe Ski Resort and development of a Safe Harbor Agreement (SHA) with the



Cheat Mountain salamander Photo by C.K. Dodd, Jr.

West Virginia Division of Forestry. Both grants were issued from the Cooperative Endangered Species Conservation Fund authorized under section 6 of the Endangered Species Act.

Atlantic Salmon (Salmo salar) The Ducktrap Coalition, a private conservation group dedicated to the protection of riparian habitat along the Ducktrap River in Maine, has announced that 80 percent of the streamside habitat is now protected either through fee title or conservation easement. The Ducktrap is one of the rivers that support the listed Gulf of Maine Distinct Population Segment of Atlantic salmon. Similar efforts are underway to protect other rivers in the area that harbor the listed salmon. The Service recently announced a Recovery Land Acquisition Grant to Maine under section 6 of the ESA to obtain an easement from the International Paper company for protecting much of the habitat adjacent to the Machias river, another DPS component.

Peregrine Falcon (Falco peregrinus)

Since the peregrine's recovery and removal from the endangered and threatened species list in 1999, monitoring indicates it is continuing to do well in New York and New England. Preliminary reports in June for the 2001 season from Vermont showed a total of 26 pairs, the best year yet for that state. New Hampshire also reported a record 12 sites with falcon pairs present, all with incubating birds confirmed by June 2001. In Boston, two resident pairs of peregrine falcons produced four chicks each, and two additional pairs, one with three chicks and one with two chicks, were reported at other sites in Massachusetts. For New York, 2001 was another record year, with 45 breeding pairs producing 96 young.

Reported by Shane Jones in the Service's West Virginia Field Office.

From September through November 2001, the Fish and Wildlife Service published the following proposed and final Endangered Species Act (ESA) rules in the *Federal Register*. The full text of each action can be accessed through our website:

http://endangered.fws.gov.

Emergency Listing Rules

Columbia Basin Pygmy Rabbit *(Brachy-lagus idaboensis)* On November 30, we gave protection to the Columbia Basin pygmy rabbit under the emergency rule provisions of the ESA. This population of the pygmy rabbit, the smallest species of rabbit in North America, consists of fewer than 50 individuals in Douglas County, Washington.

The Columbia Basin pygmy rabbit is threatened with imminent extinction because of recent significant population declines, continuing disturbances to its sagebrush habitat, disease, predation, and loss of genetic diversity. An emergency listing under the ESA provides immediate federal protection for 240 days while we publish a proposed rule under normal procedures to give the population long-term protection as an endangered species. The listing proposal was also published on November 30.

The Columbia Basin pygmy rabbit is a distinct population of native rabbit that once occupied Douglas, Grant, Lincoln, Adams, and Benton counties in central Washington. Pygmy rabbits occur in other areas of the West, but the Columbia Basin population is genetically unique, having lived in isolation from other rabbit populations for thousands of years.



Washington Department of Fish and Wildlife

In the spring of 2001, the Washington Department of Fish and Wildlife began a captive breeding program for the Columbia Basin pygmy rabbit to provide animals for release into the wild to augment the natural population. As of early December, 12 pygmy rabbits had been captured from the Columbia Basin population as an initial source for captive breeding efforts. Biologists have observed reproductive behavior in these animals, including the birth of five offspring that were conceived in the wild. Washington already has listed the pygmy rabbit as endangered under state law and has undertaken various management efforts to protect the Columbia Basin population. Currently, the species only occurs on state land.



Carson wandering skipper USFWS photo

Carson Wandering Skipper *(Pseudo-copaeodes eunus obscurus)* On November 29, we also gave emergency protection to the Carson wandering skipper, a small, tawny-orange butterfly found in only two counties in northwestern Nevada and northeastern California. The same day, we published a proposal to give the butterfly long-term protection as an endangered species.

The two Carson wandering skipper populations one in Washoe County, Nevada, and one in Lassen County, California—face imminent extinction from water export projects, grazing, development activities, and invasions of nonnative plants. A population once found in Carson City, Nevada, has already been lost.

Adult skippers feed on flower nectar and females lay their eggs exclusively on salt grass. The habitat of both remaining skipper populations is threatened by pending water export proposals that would likely lower the ground water and contribute to the loss of salt grass, the skipper's larval food source. Scientists believe the Carson wandering skipper was once more widely distributed at sites between the remaining populations before habitat degradation and fragmentation damaged other salt grass habitats.

Proposed Listing Rules

Rota Bridled White-eye *(Zosterops rotensis)* We proposed on October 3 to list the Rota bridled white-eye, a small forest bird with a distinctive ring of white feathers around its eyes, as an endangered species. It is a small (approximately 4 inches or 10 centimeters) yellowish bird with a yellow-orange bill, legs, and feet. Found in the Mariana archipelago of the western Pacific Ocean, this bird exists only on the island of Rota.

Population estimates for the Rota bridled whiteeye have declined dramatically since the early 1980s, when it numbered almost 11,000 birds. Today, fewer than 1,200 birds probably remain on Rota, an 89 percent decline. Once numerous and found at low elevations on the island, current populations are concentrated in four areas of the island in old-growth native limestone forests more than 650 feet (200 meters) in elevation. In 1991, the Commonwealth of the Northern Mariana Islands government listed the Rota bridled whiteeye as threatened or endangered under local law.

The exact causes for the sharp decline in Rota bridled white-eye populations are unknown. Possible factors contributing toward the decline include degradation or loss of habitat due to development, agricultural activities, and naturally occurring events such as typhoons; avian disease; predation by nonnative rats (*Rattus* spp.) and the black drongo (*Dicrurus macrocercus*), an introduced bird species from Taiwan; and pesticides.

Sacramento Mountains Checkerspot Butterfly (Euphydryas anicia cloudcrofti)

The high mountain meadows of native flowering plants outside the Village of Cloudcroft in southern New Mexico are the only place to find Sacramento Mountains checkerspot butterflies in the wild. Their limited range and threats to the remaining butterflies led to our September 6 proposal to list the Sacramento Mountains

checkerspot as endangered. The proposal also called for designating 5,000 acres (2,025 hectares) in Otero County as critical habitat for the butterfly. Half of the proposed critical habitat is public land managed by the U.S. Forest Service; the rest is privately owned.

The Sacramento Mountains checkerspot butterfly has a wingspan of approximately 2 inches (5 cm). It inhabits mountain meadows and other openings within the mixed-conifer forest between an elevation of 8,000 to 9,000 feet (2,450 to 2,750 m).

Extensive surveys for larvae and the adult butterflies throughout the Sacramento Mountains led us to conclude that this butterfly is found only within a 33-square-mile (85.5-square-kilometer) area. Within this small area, the butterfly's distribution is patchy and unconnected. Currently, the best information available shows that many areas of suitable habitat may be small, supporting few numbers of butterflies. Isolated populations are more vulnerable and less likely to survive over the long term.

Much of the remaining habitat is threatened by the direct and indirect effects of residential development, certain development projects in the Lincoln National Forest, highway reconstruction, offhighway vehicle use, trampling, and overgrazing. Conifers and other nonnative vegetation are encroaching on the meadows due to the suppression of periodic wildfires, impeding the survival of the native plants used by the butterfly. The resulting growth has also increased fuel loads, contributing to the threat of more catastrophic, high-intensity wildfires.

We are also concerned about continued illegal netting from unscrupulous butterfly collectors, by whom specimens of rare butterflies are highly prized. To help protect the Sacramento Mountains checkerspot butterfly, the Forest Service banned collecting the butterfly without a permit in portions of the Lincoln National Forest in 1999. Collection of illegally captured butterfly species has led to several arrests and convictions for violation of federal wildlife laws.

Final Listing Rules

Vermilion Darter (Etheostoma chermocki)

This small fish, named for its reddish-orange coloration, is found only in the Turkey Creek drainage, a tributary of the Locust Fork of the Black Warrior River, in Jefferson County, Alabama. The vermilion darter's current known range is limited to 7.2 miles (11.6 kilometers) of the Turkey Creek mainstem and the lower 0.5 mile (0.8 km) of Dry and Beaver creeks where they intersect Turkey Creek. Extensive surveys in similar habitats have failed to locate this species outside its current drainage.

Impoundments in the upper Turkey Creek mainstem and its tributaries, along with water quality degradation, have altered the stream's dynamics and reduced the darter's range significantly. The surviving population is threatened by pollutants (i.e., sediment, excess nutrients, pesticide and fertilizer runoff) that wash into the streams from land surfaces. Because the vermilion darter is in danger of extinction, we listed this species as endangered on November 28.

Spalding's Catchfly (Silene spaldingii) A

member of the carnation family (Caryophyllaceae), Spalding's catchfly is a long-lived perennial herb with small greenish-white flowers. It is currently known from a total of 52 populations scattered over west-cental Idaho, northeastern Oregon, western Montana, eastern Washington, and a single site in British Columbia, Canada. This plant is threatened by a variety of factors, including habitat destruction and fragmentation from agricultural and urban development, grazing and trampling by domestic livestock and native herbivores, herbicide treatments, and competition from invasive nonnative plant species. On October 10, we listed Spalding's catchfly as a threatened species.

Scaleshell Mussel (Leptodea leptodon) A

freshwater mollusk once found in many rivers of the eastern U.S., the scaleshell mussel has declined to the point that we listed it on October 9 as an endangered species. Nearly 75 percent of historically known populations have disappeared. The species once inhabited 55 rivers or streams in



Scaleshell USFWS photo

13 states, but now is limited to 14 rivers in Arkansas, Missouri, and Oklahoma.

Threats to the scaleshell, as with many other mussel species, include poor water quality due to pollution and sedimentation; loss and alteration of habitat through damming of waterways, dredging and channelization of rivers, and sand and gravel mining; and competition with nonnative species like the zebra mussel.

Ohlone Tiger Beetle *(Cicindela ohlone)* The Ohlone tiger beetle, an insect that exists only in Santa Cruz County, California, received final protection as an endangered species on October 3. It currently exists only in remnant stands of native grassland on coastal terraces in four small



Photo by Michael Rigsby and David Kavanaugh

geographic areas near or within the cities of Santa Cruz, Scotts Valley, and Soquel. The beetles inhabit fewer than 20 acres (8 ha) on a combination of private lands and lands owned by the University of California at Santa Cruz, the city of Santa Cruz, and the California state parks system. The tiger beetle inhabits some of the last remaining patches of a coastal prairie ecosystem that once

spanned coastal Santa Cruz County and extended into San Mateo County and Monterey counties.

The primary threat to the Ohlone tiger beetle is habitat destruction and fragmentation caused by urban development. Other threats include habitat changes caused by invasive nonnative plants, overcollection, impacts from recreational activities, pesticides, and vulnerability to extinction from natural events such as disease, fire, drought, or flood.

Ohlone tiger beetles measure no more than onehalf inch (1.2 cm) long. They have large, prominent eyes, and metallic green leathery forewings with small light spots and coppery-green legs. Active by day, adults are swift and ferocious predators that seize small prey with powerful sickleshaped jaws. Even their larvae are predatory. Tiger beetle larvae live in small vertical or slanting burrows from which they lunge and seize passing invertebrates.

Two Southwestern Plants The Holmgren milk-vetch (*Astragalus holmgreniorum*) and the Shivwits milk-vetch (*Astragalus ampullariodes*), a pair of rare plants found only near the Utah/ Arizona border, were listed September 28 as endangered. Both are perennials in the pea family (Fabaceae).

Only small numbers of these species remain. The Holmgren milk-vetch population varies from 5,000 to 10,000 plants, depending upon rainfall, and is native to Washington County, Utah, and adjacent Mojave County, Arizona, near the city of St. George, Utah. The Shivwits milk-vetch, numbering fewer than 1,000 plants, grows only in southern Washington County.

Both species grow on state and private land, as well as land administered by the Bureau of Land Management. The Shivwits milk-vetch is also found on the Shivwits Reservation of the Paiute Tribe. The numbers of both plants are rapidly decreasing due primarily to rapid urban expansion and population growth in the St. George area, where much of the plants' habitat has been destroyed or degraded by the construction of new roads, power lines, and other development. Offroad recreational vehicle use, the spread of nox-



Shivwits milk-vetch USFWS photo

ious weeds, overgrazing, and mineral development also threaten the plants' survival.

Proposed Critical Habitat Rules

Critical Habitat Critical habitat, as defined in the ESA, is a term for a geographic area that is essential for the conservation of a listed species. Critical habitat designations do not a establish a wildlife refuge, wilderness area, or any other type of conservation reserve, nor do they affect actions of a purely private nature. They are intended to delineate areas in which federal agencies must consult with the Service to ensure that actions these agencies authorize, fund, or carry out do not adversely modify the designated critical habitat. Within designated critical habitat boundaries, federal agencies are required to consult except in areas that are specifically excluded, such as developed areas within the boundaries that no longer contain suitable habitat. Maps and more specific information on critical habitats are contained in the specific *Federal Register* notice designating each area. For more information on critical habitat designations in general, go to the website for our Endangered Species Listing Program (http:// endangered.fws.gov/listing/) and click on "About Critical Habitat."

Three Central California Plants We proposed on November 15 to designate critical habitat for three native California plant species on about 66,830 acres (27,050 ha) in San Luis Obispo and Santa Barbara counties.

About 44,315 acres (17,935 ha) of critical habitat are being proposed for the La Graciosa thistle *(Cirsium loncholepis)*, 8,495 acres (3,440 ha) for the Lompoc yerba santa (*Eriodictyon capitatum*), and 14,020 acres (5,675 ha) for the Gaviota tarplant (*Deinandra increscens* ssp. *villosa*). The plants are found only in coastal areas of San Luis Obispo and Santa Barbara counties.

The La Graciosa thistle, a member of the sunflower family (Asteraceae), forms a mound of spiny plants with white flowers. Each plant can reach 40 inches (100 centimeters) or more in height. The thistle occurs in coastal dune habitat and wetlands in areas of northern Santa Barbara County and southern San Luis Obispo County, including the Guadalupe-Nipomo Dunes National Wildlife Refuge.

The Lompoc yerba santa, a shrub in the waterleaf family (Hydrophyllaceae), produces lavender flowers on sticky stems that can reach heights of 10 feet (3 meters). It grows in maritime chaparral and southern bishop pine forests in western Santa Barbara County. Three populations occur on Vandenberg Air Force Base, and one is on private land near the city of Orcutt.

The Gaviota tarplant, a gray-green annual in the sunflower family, has yellow flowers and can grow to a height of 35 inches (89 cm). It occurs in rare needlegrass grasslands between Point Arguello and Gaviota on coastal terraces and along ridgeline saddles in the Santa Ynez Mountains. One population occurs on Vandenberg Air Force Base.

Santa Cruz tarplant *(Holocarpha macradenia)* Also on November 15, we proposed designating critical habitat for the threatened Santa Cruz tarplant on about 3,360 acres (1,360 ha) in California's Contra Costa, Santa Cruz, and Monterey counties.

The Santa Cruz tarplant is an aromatic annual herb native to California's central coast. A member of the aster family, the Santa Cruz tarplant can reach a height of 20 inches (50 cm) and displays heads of yellow daisy-like flowers in summer, long after most other annual plants have begun to fade. It typically grows on coastal terrace prairies where sandy clay soils hold moisture well into the growing season.

Once found along the central coast from Marin County south to Monterey County, the Santa Cruz tarplant now occurs on public, county, state, and private lands in Monterey and Santa Cruz counties. Populations of the plant grown from experimental seeding also occur at Wildcat Canyon Regional Park in Contra Costa County in the San Francisco Bay area. The loss or alteration of habitat, livestock grazing, and displacement by nonnative annual grasses led to the plant's decline and listing as a threatened species.

Purple Amole (Chlorogalum purpureum)

We proposed on November 8 to designate critical habitat for two varieties of the purple amole, a threatened bulb-forming perennial in the lily family (Liliaceae), on about 21,980 acres (8,895 ha) in Monterey and San Luis Obispo counties, California. About 17,210 acres (6,965 ha) of critical habitat are being proposed for the purple amole variety *(Chlorogalum purpureum* var. *purpureum)* and 4,770 acres (1,930 ha) for the Camatta Canyon amole variety *(Chlorogalum purpureum)*. Both varieties have bluish-purple flowers along the length of the stalk that bloom during the day.

Loss or alteration of habitat, livestock grazing, and displacement by nonnative annual grasses contributed to the decline of both varieties.

Kneeland Prairie Penny-cress *(Thlaspi californicum)* On October 24, we proposed to designate critical habitat for the Kneeland Prairie penny-cress, an endangered native California plant, on about 74 acres (30 ha) of serpentine



Kneeland Prairie penny-cress USFWS photo

outcrops in the grasslands of Kneeland Prairie in Humboldt County, California.

A perennial herb in the mustard family (Brassicaceae), the Kneeland Prairie penny-cress produces white flowers and can grow to 5 inches (12.5 cm) tall. Approximately 5,300 plants are distributed in five colonies in one general location. The colonies are bisected by the Kneeland Airport and a county road. The population is threatened with habitat loss due to construction, maintenance and development activities, hydrologic changes, and other activities that could further disturb the habitat.

Final Critical Habitat Rules



Kootenai River white sturgeon Kootenai Tribe of Idaho photo

Kootenai River White Sturgeon *(Acipenser transmontanus)* A final designation of critical habitat was published on September 6 for 11.2 miles (18 km) of the Kootenai River in northern Idaho to benefit the endangered Kootenai River white sturgeon.

The area is entirely within Boundary County and begins 31 miles (50 km) downstream from Libby Dam at Bonner's Ferry, extending downstream to river mile 141.4, below Shorty's Island. It contains the only known spawning and early-life stage rearing sites for the species.

In December 2000, we called for limits on rapid water level fluctuations in the Kootenai River caused by operating Libby Dam to meet peak electricity demands. Reducing these large fluctuations is expected to benefit endangered sturgeon by ending the cycle of flooding and dewatering of their spawning grounds. Levee owners in the Kootenai Valley should also benefit because levee erosion will be reduced. We do not expect the critical habitat designation to affect our flow management recommendations.

Recreational fisheries on the river and the activities of the Kootenai Tribe of Idaho, including the Tribe's aquaculture program, in which juvenile Kootenai River white sturgeon are raised for release into the wild as part of the species' recovery program, also should not be affected by the critical habitat designation.

Wenatchee Mountains Checker-mallow *(Sidalcea oregana ssp. calva)* Also on September 6, we designated 6,135 acres (2,485 ha) of seasonal wetlands on state, federal, and private lands in central Washington as critical habitat for an endangered plant, the Wenatchee Mountains checker-mallow.

Most of the approximately 3,600 checker-mallow plants are found on about 95 acres (38 ha) of seasonal wetlands on the Washington Department of Natural Resources' Camas Meadows Natural Area Preserve in Chelan County. Other checkermallow plants are scattered on adjacent Forest Service land and on a small parcel of private property in Pendleton Canyon.



Wenatchee Mountains checker-mallow Photo by Ted Thomas/USFWS

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Listings and Recovery Plans as of May 31, 2002						
	ENDANGERED		THREATENED		τοται	U.S. SPECIES
GROUP	U.S.	FOREIGN	U.S.	FOREIGN	LISTINGS	W/ PLANS
MAMMALS	65	251	9	17	342	53
BIRDS	78	175	14	6	273	75
REPTILES	14	64	22	15	115	32
AMPHIBIANS	11	8	8	1	28	12
FISHES	71	11	44	0	126	95
SNAILS	21	1	11	0	33	27
CLAMS	62	2	8	0	72	56
CRUSTACEANS	18	0	3	0	21	12
INSECTS	35	4	9	0	48	29
ARACHNIDS	12	0	0	0	12	5
ANIMAL SUBTOTAL	387	516	128	39	1,070	396
FLOWERING PLANTS	568	1	144	0	713	555
CONIFERS	2	0	1	2	5	2
FERNS AND OTHERS	26	0	2	0	28	28
PLANT SUBTOTAL	596	1	147	2	746	585
GRAND TOTAL	983	517	275	41	1,816*	981

TOTAL U.S. ENDANGERED: 983 (387 animals, 596 plants) TOTAL U.S. THREATENED: 275 (128 animals, 147 plants) TOTAL U.S. LISTED: 1,258 (515 animals***, 743 plants)

* Separate populations of a species listed both as Endangered and Threatened are tallied once, for the endangered population only. Those species are the argali, chimpanzee, leopard, Stellar sea lion, gray wolf, piping plover, roseate

tern, green sea turtle, saltwater crocodile, and olive ridley sea turtle. For the purposes of the Endangered Species Act, the term "species" can mean a species, subspecies, or distinct vertebrate population. Several entries also represent entire genera or even families. ** Nine animal species have dual status in the U.S.



U.S. Department of the Interior Fish and Wildlife Service Washington, D.C. 20240 FIRST CLASS POSTAGE AND FEES PAID U.S. DEPARTMENT OF THE INTERIOR PERMIT NO. G-77