

Fish and Wildlife Service (FWS) regional endangered species staffers have reported the following news:

Region 1

Humboldt Bay NWR Outreach efforts involving the control of noxious weeds continue at Humboldt Bay National Wildlife Refuge (NWR). Refuge Ecologist Andrea Pickart, Biological Technician Abe Walston, and volunteer Kyle Wear recently participated in "Alien Invaders Day" at the Arcata Natural History Museum. Walston produced a display on biodiversity and Pickart produced "Wanted: Dead Not Alive" flyers for the "dirty dozen" non-native species.

Approximately 40 students from the Universities of Montana and Utah recently spent a day on iceplant (*Carpobrotus edulis*) control at the Lanphere Dunes Unit of Humboldt Bay NWR as part of their week-long alternative spring break program, "Breakaway." They also worked a day under Pickart's direction on the control of eastern beachgrass (*Ammophila breviligulata*), another non-native plant.

Habitat Conservation Staff from the FWS Ventura, California, Office have been working with several public and private partners over the past few months to conserve coastal wetlands, dunes, and endangered species habitat in the Ormond Beach area of Ventura County. Some highlights follow: 1) with help from the Boy Scouts, we removed dilapidated fencing at the site of a nesting colony of endangered California least terns (*Sterna antillarum browni*); 2) with Oxnard City Corps (a youth development group), we will be installing a new and mobile protective barrier around the tern colony; 3) with California Lutheran University, we are studying environmental contaminants, soils, and vegetation at estuarine restoration areas;

and 4) with the Oxnard Police Department, we are developing a training video and enforcement protocols for protection of the tern colony.

Some of the funding for these activities comes from partnerships with the Ventura County Fish and Game Commission, City of Oxnard Redevelopment Committee, and Southern California Edison through an FWS Challenge Cost-share Grant. The Ormond Beach Observers, a citizen's group, organizes outreach efforts. Other State and federally listed species that will benefit from these efforts include the western snowy plover (*Charadrius alexandrinus nivosus*), Belding's savanna sparrow (*Passerculus sandwichensis*), and salt marsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus*), an annual plant.

Threats to the habitat include impacts from industry, recreation, and development. The Southern California Wetlands Partnership (formerly known as Wetlands Clearinghouse), a cooperative State/Federal effort to restore and preserve southern California wetlands, now lists Ormond Beach as a high priority. In addition to participating with the Clearinghouse, our Ventura Office has been involved in several Ormond Beach conservation efforts with a multitude of cooperating partners, including: the Oxnard City Corps (teens and young adults volunteering in the community), Southern California Edison and Houston Industries (landowners and generating station operators at Ormond Beach), California Lutheran University, Ventura County Fish and Game Commission, and California Department of Fish and Game.

San Luis NWR Complex This spring, our Partners for Fish and Wildlife Program began its 1999 construction season at the San Luis NWR Complex. Two major restoration efforts are on the San Felipe Ranch and on the Kulwant Somal property. The San Felipe project will restore 2.5 miles (4 kilometers) of Owens Creek and associated flood plain. The Somal project will restore 180 acres (73 hectares) of seasonal wetlands and associated uplands in the North Grasslands.

Po'ouli (*Melamprosops phaeosoma*) In an effort to prevent the extinction of this severely endangered Hawaiian forest bird, the FWS and State of Hawaii are proposing intensive habitat management and the translocation of one or more individuals. Endemic to the island of Maui, the po'ouli currently



Po'ouli
Photo by Paul Baker

is found only in a restricted area of the island's remaining rainforest. This species has been declining since its discovery in 1973, and the total population may number no more than three individuals. From the six management proposals considered, we selected a combined alternative: continue and intensify habitat management to reduce or eliminate threats to the birds in the action area and, if necessary and feasible, conduct translocation(s) in an attempt to bring isolated birds together to form a breeding pair.

Reported by LaRee Brosseau of the FWS Portland Regional Office.

Region 5

Bats In cooperation with the New Jersey Division of Fish, Game, and Wildlife's Endangered and Nongame Species Program, the FWS New Jersey Field Office conducted a bat survey of the Hibernia Mine in Morris County. A total of 18 endangered Indiana bats (*Myotis sodalis*) were found hibernating at the site. Non-endangered bats also were found: 59 eastern pipistrelles (*Pipistrellus subflavus*), 21 northern long-eared bats (*Myotis septentrionalis*), 5 big brown bats (*Eptesicus fuscus*), and 28,088 little brown bats (*Myotis lucifugus*). The surveyors observed bands on three of the little brown bats. Researchers had banded 2 of the bats in the summer of 1997 within 5 miles (8 kilometers) of the Hibernia Mine while evaluating summer habitat use on and adjacent to the Picatinny Arsenal in Morris County, New Jersey. The third bat was banded the same summer during a research project at the Durham Mine in Quakertown, Pennsylvania.

Reported by Lisa Arroyo of the FWS New Jersey Field Office.

During February and March of 1999, the Fish and Wildlife Service (FWS) published the following proposed and final Endangered Species Act (ESA) listing actions in the *Federal Register*:

Listing Proposals

Mountain Plover (*Charadrius montanus*)

Despite its common name, the mountain plover is not a mountain-dwelling bird but a species of short-grass prairies and shrub-steppe landscapes. Short vegetation, bare ground, and a flat topography are needed by mountain plovers at both their breeding and wintering locales. Extensive changes in these habitats have led to a decline of more than 60 percent in the mountain plover's population since 1966. One factor likely to be responsible for the plover's vulnerable status is the widespread conversion of grasslands to agricultural and urban lands. Another is the decline of prairie dogs, which provide ideal habitat conditions for mountain plovers. Due to the species' vulnerable status, the FWS proposed on February 16 to list the mountain plover as threatened.



Prairie dog
Corel Corp. photo

Bird species endemic to North American grasslands have declined more rapidly than other species in this region, with the mountain plover falling the fastest. The mountain plover breeds in the Rocky Mountain States from Canada to Mexico, primarily in Montana, Colorado, and Wyoming. Most of the birds winter on grasslands or similar habitats in California, although some spend the season in Arizona, Texas, and Mexico.



Mountain plover
Photo by Fritz Knapf/USGS-BRD

Biologists are trying to determine if spring tilling and planting on the drylands of southern Wyoming, eastern Colorado, southwestern Kansas, and northwestern Oklahoma may be contributing to the plover's decline. The possible impacts of pesticide exposure will also be examined. FWS biologists will work with landowners to develop recommendations as to how land uses can be modified, if necessary, to benefit both farmers and mountain plovers. If the species is listed as threatened, it should not have an impact on grazing. In fact, grazing can be beneficial to mountain plovers by maintaining open areas within short-grass habitats; mountain plovers evolved in association with bison and other grazing animals.

Alabama Sturgeon (*Scaphirhynchus suttkusi*)

The Alabama sturgeon, a freshwater fish that historically inhabited some 1,000 miles (1,600 kilometers) of the Mobile River system in Alabama, was once so abundant that it was caught and sold commercially. But today it is among the rarest of North American fish.

The Alabama sturgeon is long and slender, growing to about 30 inches in length, and is a golden-yellow color. A mature fish weighs 2-3 pounds. The head is broad and flattened, shovel-like at the snout. Bony plates cover the head, back and sides. The body narrows abruptly to the rear to form a narrow stalk between body and tail. The upper lobe of the tail fin is elongated and ends in a long filament.

Within the Mobile River system, the Alabama sturgeon inhabited the Black Warrior, Tombigbee, Alabama, Coosa, Tallapoosa, Mobile, Tensaw, and Cahaba

ivers, as well as stretches of the Tombigbee River in Mississippi. It has disappeared, however, from approximately 85 percent of its historic range in the Alabama and Tombigbee rivers and their major tributaries in Mississippi and Alabama. Since 1985, all confirmed captures have been restricted to a short, free-flowing reach of the Alabama River in Clarke, Monroe, and Wilcox counties, Alabama.

During the past 2 years, FWS biologists have worked with the Alabama Department of Conservation and Natural Resources, the Alabama-Tombigbee Rivers Coalition (a group of private businesses and industries with economic interests in these rivers), and other partners on efforts aimed at increasing the numbers of Alabama sturgeon. As a part of these efforts, the Marion State Fish Hatchery has been modified to maintain and propagate Alabama sturgeon, and efforts to collect brood stock have been initiated. Biologists also are seeking to identify important habitats for the species in the Alabama River and to develop strategies for protection and management.

The decline of the sturgeon is believed to be due to overfishing, the loss and fragmentation of habitat as a result of navigation related development, and degradation of water quality. Today, the species' population has been reduced to the point where, if no conservation measures are taken, its chances for recovery are slim. The numbers of surviving sturgeon may be too low for natural reproduction to restore a sustainable population in the wild.

The FWS originally proposed the Alabama sturgeon for endangered status on June 15, 1993. Because of a lack of proof that the species still existed, the proposal was withdrawn on December 15, 1994. Since then, however, six fish have been caught by State, Federal, and commercial and recreational fishermen, events that confirm its continued existence.

The FWS and U.S. Army Corps of Engineers have examined river activities and potential conflicts that might arise from listing the Alabama sturgeon. This study resulted in a joint determination that current activities in the Alabama and Tombigbee rivers, including the annual navigation channel maintenance dredging programs, will have no impact on the sturgeon and will not need to be eliminated or modified should the species be listed. Both waterways already



Alabama sturgeon

Photo by Dr. Elise Irwin/NBS

contain habitat for four listed mussel and fish species, and their presence has not resulted in any use restrictions on the Alabama and Tombigbee rivers.

Delisting Proposals

Tinian Monarch (*Monarcha takatsukasae*)

This creature is not true royalty or a butterfly but a small forest bird endemic to the island of Tinian in the Mariana archipelago of the western Pacific Ocean. It was listed in 1970 as endangered because its population was believed to be critically low due to the destruction of native forests by pre-World War II agricultural development and military action during the war. Based on forest bird surveys conducted in 1982, which resulted in a population estimate of 40,000 monarchs, the FWS reclassified this species in 1987 to the less critical category of threatened. A 1996 survey indicated a population gain to about 53,000 monarchs and noted significant reforestation. Most of the forest renewal has occurred on land managed and



Tinian monarch

Photo by Jaan Kaimanu Lepson

protected by the U.S. Navy under a long-term lease. Because of the recovery of this bird and its habitat, the FWS proposed on February 22, 1999, to remove the Tinian monarch from the list of threatened and endangered species.

Final Listing Rules

Sacramento Splittail (*Pogonichthys macrolepidotus*) A fish found only in California's Sacramento-San Joaquin Delta and Central Valley rivers, the Sacramento splittail is a silvery-gold member of the minnow family that can grow up to 16 inches (40 centimeters) in length. Its upper tail is enlarged and appears to be split, giving the fish its common name. Historically, it occurred in the Sacramento River as far north as Redding and in the San Joaquin River almost as far south as Fresno. This fish has declined by 62 percent over the past 15 years due to water diversions, periodic prolonged droughts, loss of shallow water breeding habitats, introduced aquatic species, and agricultural and industrial pollutants. Because of the Sacramento splittail's vulnerable status, the FWS proposed on February 8 to list it as threatened.

Catesbaea melanocarpa This rare Caribbean plant, which has no common name, is a small, spiny shrub in the family Rubiaceae. It has been reported from Barbuda, Antigua, and Guadeloupe of the Lesser Antilles and, in the U.S., from Puerto Rico and St. Croix (U.S. Virgin Islands). Much of its preferred dry forest habitat on these islands has been eliminated by agricultural and urban development. Due to the threats posed by continuing habitat loss, the FWS listed *C. melanocarpa* on March 17 as endangered.

The Internet is a great source of information on the activities of zoos and other institutions to recover endangered species. Here are some sites to get you started:

The U.S. Fish and Wildlife Service's Endangered Species Recovery and Delisting Program has a website with information on cooperative efforts with zoos: <http://fws.gov/r9endspp/recovery/partner3.htm>

You can reach the American Zoo and Aquarium Association (AZA) at <http://www.aza.org>

AZA institutions mentioned in this edition of the *Bulletin* include:

The Phoenix Zoo (Phoenix, Arizona)
<http://www.phoenixzoo.org/>

Knoxville Zoo (Knoxville, Kentucky)
<http://www.knoxville-zoo.com/>

Louisville Zoo, (Louisville Kentucky)
<http://www.iglou.com/louzoo/>

John Ball Zoological Garden (Grand Rapids, Michigan)
<http://www.co.kent.mi.us/zoo/>

Toledo Zoological Gardens (Toledo, Ohio)
<http://www.toledozoo.org/>














Roger Williams Park Zoo (Providence, Rhode Island)
<http://users.ids.net/~rwpz/>

Tennessee Aquarium (Chattanooga, Tennessee)
<http://www.tennis.org/>

The Metro Toronto Zoo (Ontario, Canada)
<http://www.torontozoo.com/>

BOX SCORE

Listings and Recovery Plans as of June 30, 1999

GROUP	ENDANGERED		THREATENED		TOTAL LISTINGS	U.S. SPECIES W/ PLANS**
	U.S.	FOREIGN	U.S.	FOREIGN		
 MAMMALS	61	251	8	16	336	48
 BIRDS	75	178	15	6	274	77
 REPTILES	14	65	21	14	114	30
 AMPHIBIANS	9	8	8	1	26	11
 FISHES	69	11	41	0	121	88
 SNAILS	18	1	10	0	29	20
 CLAMS	61	2	8	0	71	45
 CRUSTACEANS	17	0	3	0	20	12
 INSECTS	28	4	9	0	41	27
 ARACHNIDS	5	0	0	0	5	5
ANIMAL SUBTOTAL	357	520	123	37	1,037	363
 FLOWERING PLANTS	540	1	135	0	676	494
 CONIFERS	2	0	1	2	5	2
 FERNS AND OTHERS	26	0	2	0	28	26
PLANT SUBTOTAL	568	1	138	2	709	522
GRAND TOTAL	925	521	261	39	1,746*	885

TOTAL U.S. ENDANGERED: 925 (357 animals, 568 plants)
 TOTAL U.S. THREATENED: 261 (123 animals, 138 plants)
 TOTAL U.S. LISTED: 1186 (480 animals***, 706 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.

**There are 519 approved recovery plans. Some recovery plans cover more than one species, and a few species have separate plans covering different parts of their ranges. Recovery plans are drawn up only for listed species that occur in the United States.

***Nine animal species have dual status in the U.S.

ENDANGERED Species BULLETIN

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 Fish and Wildlife Service
 Washington, D.C. 20240

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