

Rare & Endangered Species

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Introduction

Protecting endangered and threatened species and restoring them to a secure status in the wild is the primary objective of the endangered species program of the U.S. Fish & Wildlife Service, an agency of the Department of Interior. Responsibilities of the endangered species program include the following:

- Listing, reclassifying and delisting species under the Endangered Species Act (ESA).
- Providing opinions to Federal agencies on their activities that may affect listed species.
- Overseeing recovery activities for listed species.
- Providing for the protection of important habitat.
- Providing grants to States to assist with their endangered species conservation efforts.

Private Landowner Issues

Why do we need to protect endangered and threatened species on private land? Isn't protection on Federal lands enough?

The Department of Interior and the US Fish & Wildlife Service agree that protection of Federally-listed species on Federal lands should be a first management priority. In fact, the Secretary of Interior's March 6, 1995, 10-point plan to improve implementation of the Endangered Species Act states this principle explicitly. However, many Federally-listed species occur partially, extensively or, in some cases, even exclusively on private lands, so private lands are often essential in protecting and recovering endangered species. To meet this challenge, we must develop policies that protect landowners' interests in their land, and provide them with incentives to manage their lands in ways that benefit endangered species. The Department of Interior and US Fish & Wildlife Service are fully committed to finding this balance between "private property rights" and endangered species protection.

What is the US Fish & Wildlife Service doing to expedite and streamline Endangered Species Act requirements in general and the Habitat Conservation Plan (HCP) process in particular to make them more user-friendly to private landowners?

The Department of the Interior and US Fish & Wildlife Service have been developing numerous new policies and initiatives for this purpose, including:

- On April 21, 1995, the Fish & Wildlife Service issued an incidental take permit for the Sandhills area of North Carolina initiating the so-called "Safe Harbor" program for the first time. "Safe Harbor" authorizes all future incidental take of Federally-

listed species that inhabit a property as a result of a landowner's affirmative conservation efforts. In other words, if a landowner manages the land in a manner that attracts listed species, the Government will hold future regulation of those lands to a minimum. There is one exception. Listed species already inhabiting a property at the time the landowner enrolls in the program—called the “Environmental Baseline”—would remain fully protected under the Endangered Species Act. Thus, the worst case would be a return to baseline conditions, while the best case is short-term habitat stabilization for many species as well as long-term species benefits.

- On July 6, 1994, the Fish & Wildlife Service announced in the Federal Register six policies designed to improve Endangered Species Act implementation, including a directive requiring the Fish & Wildlife Service, at the time a species is listed, to publish notice of those activities which would not be considered a “take” of the species being listed. This reduces landowner uncertainty about what is and is not a legal taking, and relieves them from the necessity for an incidental take permit when an activity is included in such a notice.
- On February 17, 1995, the Fish & Wildlife Service published a proposed rule for the northern spotted owl in Washington and California that, among other things, would: (1) permit the take of a northern spotted owl by small private landowners during harvest of up to 80 acres of timber, so long as the 70 acres of habitat closest to an owl “site center” is not disturbed; and (2) allow access by landowners owning 80 to 5,000 acres to a “Local Option Conservation Plan”—an expedited HCP process.
- The Fish & Wildlife Service released for public comment a new draft handbook for implementing the Section 10 incidental take permit program which introduces significant improvements. The handbook: (1) establishes HCP categories based on scope and impact of the project; (2) ties document and permit processing requirements directly to those categories; (3) significantly streamlines permit processing requirements for small-scale, relatively low-effect projects (including exemption from National Environmental Policy Act [NEPA] requirements); and (4) provides clear, nation-wide standards to help standardize program implementation.
- In Austin, Texas, the Fish & Wildlife Service has established an expedited HCP process for small lot owners who wish to construct single-family homes in golden-cheeked warbler habitat.
- In the Olympia, Washington, field office, the Service has assembled an entire staff to assist timber companies to develop multiple-species HCP's for private timber lands. Included on this staff are National Marine Fisheries Service (NMFS) employees on detail (NMFS is responsible for marine species and anadromous fish under the Endangered Species Act). This interagency team devoted entirely to HCP's is resulting in highly focused and rapid HCP efforts in the Pacific Northwest.
- On August 9, 1994, the Department of the Interior and Department of Commerce issued a joint “No Surprises” policy assuring “non-Federal landowners participating

in Endangered Species Act [HCP efforts] that no additional land restrictions or financial compensation will be required for species adequately covered by a properly-functioning HCP in light of unforeseen or extraordinary circumstances.” Essentially, this policy assures HCP participants and Section 10 permittees that once the Fish & Wildlife Service approves an HCP, it will impose no further requirements on restrictions without the permittee’s consent, even if the status of the species worsens.

- For FY 1996, the Fish & Wildlife Service has requested funds for a new grant program under Section 6 of the Endangered Species Act that would allow funds typically provided to individual states for endangered species conservation efforts to be granted, through the states, to private entities engaged in HCP and other habitat-based planning efforts. Such grants would assist local governments to protect endangered species habitats, thus reducing the burden of such programs on the private sector.

Summary of Concerns (see below)

Listed Species

Birds

Bald eagle (*Haliaeetus leucocephalus*)

Description: A very large member of the hawk/eagle group having long wings and a long bill. Adults have white heads and tails and yellow bills. Bald eagles are 30 to 43 inches long and have a wing spread of 7 to 8 feet.

Range: Bald eagles migrate or winter over much of North America and concentrate where food supplies are available. Within the contiguous 48 states, most nesting occurs in the Pacific Northwest, around the Great Lakes and in Florida. Over 95 percent of Oregon’s nesting sites fall within five areas as follows: the Columbia River below Portland, the Oregon Coast and Coast Range, the High Cascade, Klamath Basin, and upper Willamette River Basin. In winter, eagles occur in every county but concentrate in specific areas that have dependable food supplies .

Status: Threatened in Oregon under both State and Federal endangered species acts. Also, are Federally threatened in 48 conterminous states. In 1995 there were 245 known occupied breeding territories in Oregon, the largest recorded since records were kept starting in 1979. Greatest numbers of nesting bald eagles in the State occur in the Klamath Basin region. Most or all of Oregon’s breeding bald eagles are believed to remain in the State for the winter.

Habitat Requirements: In Oregon, breeding habitat is associated with large water bodies that support fish populations and have large trees for nesting nearby. Nesting trees are typically in old-growth trees, the tallest in the stands, or are survivors from former old-growth stands. They are primarily in ponderosa pine (*Pinus ponderosa*), mixed Douglas-fir (*Pseudotsuga menziesii*), and sitka spruce (*Picea sitchensis*)/western hemlock (*Tsuga heterophylla*) forest types. Nests are huge structures five or more feet in diameter, usually supported by large limbs that extend out on a horizontal plane at the top of a broken-off conifer. During the nesting season, the primary source of food is fish.

Protected sites for roosting must also be present. These conditions tend to exist in valleys, inland basins, and river corridors having adjoining forested upland for roosting. Roosting sites are often in stands of mature or old-growth conifers, but also can be in large deciduous trees on basin floors, 20 or more miles from feeding sites.

Reasons for Threatened Status: Habitat loss through liquidation of late-successional/old-growth forests and trees, recreational developments, and other human activities: shooting; abnormally low reproduction caused by contaminants, including DDE (a metabolite of DDT), PCB's, and dioxin; lead poisoning; exposure to poisons used in pest control activities; power line electrocutions; and collisions.

Northern Spotted Owl (*Strix occidentalis caurina*)

Description: A medium-large, dark-eyed, brownish-colored owl having white spots on the head and neck and brown and white mottling on the back, breast, and abdomen. This is one of the three recognized subspecies of the spotted owl. It is mostly nocturnal. The adults inhabit a territory year-round, are monogamous, long-lived and do not nest every year. Their young disperse from their natal territory in September and October.

Range: Permanent resident from southwestern British Columbia south into the Coast Range of California as far as San Francisco Bay. Their range in Oregon occurs in heavily forested areas in the western one-third of the state, including portions of the Cascade Range where mixed conifer types occur.

Status: Listed as threatened by U.S. Fish and Wildlife Service and Oregon Department of Fish and Wildlife under Federal and State endangered species acts. Total population is unknown. Surveys conducted from 1987 to 1992 accounted for 3,605 known pairs plus 1,000 sites having single owls.

Habitat: In Oregon they are typically found in mountainous areas characterized by mixed stands of mature and old-growth forest containing Douglas-fir (*Pseudotsuga menziesii*). Out of 595 spotted owl sites occupied by pairs in Oregon, 98 percent were forested with conifers that exceeded 200 years of age. The most consistent feature of old-growth forests occupied by spotted owls was the presence of an uneven-aged, multi-layered canopy. Old-growth forests were also characterized by moderate-to-high numbers of large trees with broken tops, deformed limbs and heart rot. Spotted owl nests were usually located in such trees, with a high volume of logs and other woody debris on the ground, which provide cover for spotted owl prey.

Reasons for Threatened Status: Declining habitat caused primarily by timber harvesting. Natural factors such as wind and fire play a lesser role. There is concern that isolation of some segments of the population may preclude adequate dispersal, resulting in genetic isolation and susceptibility to predation and stochastic events such as fire and wind.

Fish

Coho Salmon (coastal) (*Oncorhynchus kisutch*)

Description: Coho can be distinguished from other Pacific salmon species by the presence of small black spots on the back and on the upper lobe of the caudal fin. They lack the spots on the lower portion of the tail and have white gums at the base of the teeth. Adult coho typically are four to twelve pounds at maturity; juveniles are identified by long, narrow, widely-spaced parr marks and the long leading edge of the anal fin.

Range: From Monterey Bay, California, north to Point Hope, Alaska. In Asia, it occurs from Hokkaido north to the Anadyr River. In Oregon they range from the Columbia River Basin east to the Hood River, and the Clackamas River south to the California border.

Status: Listed.

Habitat: Spawning and rearing habitat generally occur in low gradient tributaries and side channels of river systems. Juvenile fish rear approximately one year in freshwater before migrating to the ocean. For overwintering, a habitat of complex pools with woody debris and off-channel alcoves, appears to be critical to the survival of juveniles in freshwater.

Reasons for Threatened Status: There is pronounced declines in abundance overall and extirpation of some populations, particularly in the Columbia River basin. Conservation problems are due to a combination of factors, including habitat degradation from land use practices and road-building, and high harvest rates in mixed-stock fisheries (hatchery and wild). Adverse ocean rearing conditions have also been shown to be a factor.

Plants

Macdonald's Rockcress (*Arabis macdonaldiana*), Also known as Red Mountain Rock Cress

Description: Characteristics of this plant are its rose-purple petals, each about three-eighths of an inch long, its spatulate basal leaves which are three-quarters of an inch in length, shiny, and hairless with one or two teeth on each margin, and its siliques that are about one and one-half inches long. It blooms in April.

Habitat: Mustard Family (Brassicaceae). There is much confusion at this time as to the validity of this name for the species found in Curry County, Oregon. Some argue that the only true *Arabis macdonaldiana* is the one found on Red Mountain in California, and that the one in Oregon is a new species, simply being referred to as *Species novum*. *Arabis macdonaldiana* is listed Federally as endangered. *Species novum* in Oregon, whatever its name, is considered to be threatened throughout its range.

Proposed Species

Plants

Gentner's fritillaria (*Fritillaria gentneri* Gilkey)

Description: *Fritillaria gentneri* may reach two feet in height. The stout stem has several whorls of leaves in the middle position. The flowers are nodding, are dull reddish-purple with yellow streaks within and without, and are up to one and one-half inches long. The petals may flare out at the tips, but are not recurved. It blooms in April and May.

Habitat: Lily Family (*Liliaceae*). This fritillary of Jackson and Josephine counties in southwestern Oregon grows at lower elevations in dry, open fir and oak woodlands. It is rare and endangered throughout its range.

Candidate Species

Fish

Steelhead (Klamath Mountains Province) (*Oncorhynchus mykiss*)

Description: Steelhead are steel blue above and bright silver on the sides and belly, with sharply defined black spots located on back, head, sides, and dorsal and caudal fins. Spots are small and vary in number.

Range: Steelhead occur in the northern Pacific and enter streams from the Kuskokwim River in Alaska to the Santa Domingo River in northern Baja California and in Asia south to Japan.

Habitat: Steelhead spend part of their life in the ocean where most of their growth occurs. Spawning generally takes place from February to late June. They spawn in cool, clear, well-oxygenated streams with suitable depth, current velocity and gravel size. They prefer to spawn at depths of 1.10 - 1.5 m, with current velocities of 23-155 cm/second. After the eggs are laid, the female covers them with gravel. After the eggs hatch, the young surface and then, as juveniles, work their way to the ocean. In large rivers, such as the Klamath and Sacramento Rivers, Steelhead may enter during most of the year. Steelhead live in riffles and primarily on immature aquatic stages of insects and secondarily on mature terrestrial insects. Steelhead may have difficulty extracting oxygen from water at temperatures much over 21 degrees Celsius. Whenever temperatures fall below 4 degrees Celsius in streams of the Pacific Northwest, juvenile steelhead become inactive and hide in available cover.

Reason for Sensitive Status: Steelhead are the most widespread anadromous sport fish in the Pacific Southwest region, but its abundance has declined because of increased sport fishing intensity. Damage to fish habitat has also affected declines through water diversion, road construction, and improper land management practices.

Plants

Umpqua mariposa-lily (*Calochortus umpquaensis*)

Description: The Umpqua mariposa grows about 12 to 15 inches tall with a generally glabrous and glaucous foliage. One basal leaf is usually as tall or slightly taller than the main stem with a usually smaller clasping leaf about one-third of the way up the stem. Pairs of lanceolate, leaf-like bracts about one inch long are located at the point of division for each flower head. Each plant usually has two to five large, showy flower heads. The petals are pure white with a green area near the base. They are broad near the apex and hairless on the outer surface. The inner surface of the petals are extremely white-hairy from near the shallowly toothed distal margins to the area of the gland at the base.

Range: This species is found only in serpentine rock and soil in a few small areas of the North Umpqua drainage and may occur in the Illinois River watershed. It is considered to be endangered throughout its range.

Cook's lomatium (*Lomatium cookii*)

Description: *Lomatium cookii* grows to about twelve inches tall, is light green, glabrous and has stems which are grooved quite deeply longitudinally. The erect basal leaves are about equally as tall as the flowering stems. They are several times divided into narrow, linear segments. One feature that distinguishes this species from others is the involucre bracts which subtend each head of flowers within the umbel. About fourteen in number, these bractlets are long, narrow, broadest in the middle and pointed at the tip. The flowers are yellow, five-petalled and clustered tightly with stamens well-exserted. It blooms in March and April.

Range: Cook's lomatium is a recently-discovered species known only from the "Agate Desert" of Jackson County and Josephine County in southern Oregon.

Species of Concern**Mammals**

Pacific western big-eared bat (*Plecotus townsendii townsendii*)
California wolverine (*Gulo gulo luteus*)
Pacific fisher (*Martes pennanti pacifica*)
Long-eared myotis (bat) (*Myotis evotis*)
Fringed myotis (bat) (*Myotis thysanodes*)
Long-legged myotis (bat) (*Myotis volans*)
Yumma myotis (bat) (*Myotis yumanensis*)

Birds

Peregrin falcon (*Falco peregrinus anatum*)
Northern goshawk (*Accipiter gentilis*)
Olive-sided flycatcher (*Contopus cooperi [=borealis]*)
Little willow flycatcher (*Empidonax traillii brewsteri*)

Amphibians and Reptiles

Tailed frog (*Ascaphus truei*)
Northwestern pond turtle (*Clemmys marmorata marmorata*)
Del Norte salamander (*Plethodon elongatus*)
Siskiyou Mountains salamander (*Plethodon stormi*)
Northern red-legged frog (*Rana aurora aurora*)
Foothills yellow-legged frog (*Rana boylei*)
Southern seep salamander (*Rhyacotriton variegatus*)

Fish

Chinook Salmon (*Oncorhynchus tshawytscha*)
Cutthroat Trout (*Oncorhynchus clarki*)
Pacific lamprey (*Lampetra tridentata*)

Invertebrates

Siskiyou gazelle beetle (*Nebria gebleri siskiyouensis*)
Obrien rhyacophilan caddisfly (*Rhyacophila colonus*)

Plants

Bensoniella (*Bensoniella oregana*)
Crenulate grape-fern (*Botrychium crenulatum*)
Howell's mariposa lily (*Calochortus howellii*)
Sexton Mountain mariposa-lily (*Calochortus indecorus*)
Howell's camassia (*Camassia howellii*)
Purple Toothwort (*Crddamine gemmata*)
Tall bugbane (*Cimicifuga elata*)
Clustered lady's-slipper (*Cypripedium fasciculatum*)
Oregon willow-herb (*Epilobium oreganum*)
Umpqua green-gentian (*Frasera umpquaensis*)
Elegant gentian (*Gentiana setigera*)
Waldo gentian (*Gentiana setigera* [=bisetaea])
Purple flowered rush-lily (*Hastingsia atropurpurea*)
Large-flowered rush-lily (*Hastingsia bracteosa*)
Howell's lewisia (*Lewisia cotyledon* var. *howellii*)
Purdy's lewisia (*Lewisia cotyledon* var. *purdyi*)
Slender meadow-foam (*Limnanthese gracilis* var. *gracilis*)
Howell's microseris (*Microseris howellii*)
Red-root yampah (*Perideridia erythrorhiza*)
Coral seeded allocarpa (*plagiobothrys figuratus* var. *corallicarpus*)
Rogue River stonecrop (*Sedum moranii*)
Small, star-fruited stonecrop (*Sedum radiatum* ssp. *depauperatum*)
Western senecio (*Senecio hesperius*)
Western necklace (*Sophora leachiana*)
Western bog violet (*Viola primulifolia occidentalis*)

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