



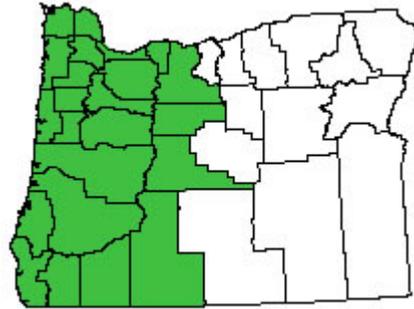
## Oregon Fish and Wildlife Office

# NORTHERN SPOTTED OWL (*Strix occidentalis caurina*)

### *Endangered Species Fact Sheet*



**STATUS: THREATENED**



**Distribution of northern spotted owls in Oregon**  
Clatsop, Tillamook, Lincoln, Coos, Curry, Josephine, Jackson, Klamath, Douglas, Deschutes, Lane, Jefferson, Lane, Linn, Benton, Polk, Marion, Yamhill, Washington, Multnomah, Clackamas, Wasco, Hood River, Columbia counties

The northern spotted owl was federally listed as threatened under the Endangered Species Act in 1990. In 1992, areas of critical habitat were designated to further protect this subspecies on federal lands.

### Historical Status and Current Trends

The northern spotted owl is believed to have historically inhabited most forests throughout southwestern British Columbia, western Washington and Oregon, and northwestern California as far south as the San Francisco Bay. Loss and adverse modification of nesting, roosting and foraging habitat due to timber harvesting, land conversions, natural disturbances such as fire and windstorms, and increased competition with barred owls, however, have led to a decline of northern spotted owls throughout much of their historic range. Today spotted owls are particularly rare in British Columbia, the Cascade mountains of northern Washington, the Coast ranges of southwest Washington and northwest Oregon. A large and virtually isolated population persists on the Olympic peninsula. Estimates suggest that the amount of suitable habitat available to spotted owls has been reduced by over 60% in the last 190 years. Owl numbers appear to have declined annually since 1985 when many studies began. Although the listing of the spotted owl as threatened and the designation of critical habitat offer some protection for the spotted owl on federal lands, past trends suggest that much of the remaining unprotected habitat could disappear in 10 to 30 years.

### Habitat

Northern spotted owls live in forests characterized by dense canopy closure of mature and old-growth trees, abundant logs, standing snags, and live trees with broken tops. Although they are known to nest, roost, and feed in a wide variety of habitat types, these owls prefer older forest stands with variety: multi-layered canopies

of several tree species of varying size and age, both standing and fallen dead trees, and open space among the lower branches to allow flight under the canopy. Typically, forests do not attain these characteristics until they are at least 150 to 200 years old.

### Description and Life History

A medium sized, chocolate brown owl with dark eyes, the northern spotted owl is a nocturnal "perch-and-pounce" predator that captures its prey (primarily small forest mammals) with its claws. Like most owl species, the spotted owl nests in the tops of trees or in cavities of naturally deformed and/or diseased trees. Spotted owls mate for life and may live up to 20 years. Although the breeding season varies with geographic location and elevation, spotted owls generally nest from February to June. One to four (usually two) pure white eggs are laid in the early spring and hatch about a month later. During incubation, the male typically does most of the foraging and brings food to the female and the young owlets. At 3-4 weeks of age, the owlets are able to perch away from the nest, but still depend on their parents for food. Predation on these defenseless juveniles by great horned owls and other predators is high at this time and many do not survive. Parental care of the juveniles generally lasts into September when the young owls finally take off on their own. This period, too, is hard for the young birds and starvation is common in the first few months on their own.

### Reasons for Decline

Prior to the listing of the northern spotted owl, timber harvesting and land conversions resulted in the loss of owl habitat. Forests with the late-successional and old-growth characteristics preferred by spotted owls are also preferred for timber harvesting, to meet the demand for all types of forest products. As the amount of suitable habitat declines, so do the numbers of spotted owls. When spotted owls are forced to live in small patches of forest they become more susceptible to starvation, predation or further loss of habitat due to natural destruction such as windstorms.

### Conservation Measures

The listing of the northern spotted owl as threatened and the designation of critical habitat are helping to reduce habitat loss on federal lands. Although the need for timber necessitates continued harvesting, new forest management practices now stress restricted harvesting in old-growth forests and suggest alternate areas for harvest which are less preferred by spotted owls. Careful planning of timber sales and wise use of forest resources is necessary to halt the decline of the northern spotted owl and other old growth-associated species. The Northwest Forest Plan, created in 1994, creates a system of late-successional reserves (LSR) across the range of the species that are designed to provide suitable nesting habitat over the long term. The federal forest lands outside these reserves are managed to allow dispersal between the LSRs through riparian reserves and other land allocations. In 2004, the Fish and Wildlife Service completed a [5-year review](#) of the status of the northern spotted owl. We concluded that the species continues to warrant the protection of the Endangered Species Act as a threatened species.

### References and Links

National Park Service. Website for Northern Spotted Owl. <http://www.nps.gov/olym/owl.htm>

U.S.D.A. Forest Service. Website for Northwest Forest Plan. <http://www.fs.fed.us/r6/nwfp.htm>

U.S. Fish and Wildlife Service. 1990. Determination of threatened status for the Northern Spotted Owl. Federal Register (55):26114-26194. <https://ecos.fws.gov/docs/frdocs/1990/90-14889.pdf>

U.S. Fish and Wildlife Service. 1992. Determination of critical habitat for the Northern Spotted Owl. Federal Register (57):1796-1838. <https://ecos.fws.gov/docs/frdocs/1992/92-874.pdf>

U.S. Fish and Wildlife Service. Website for Northern Spotted Owl. <http://endangered.fws.gov/i/b6k.html>