

# Mexican Spotted Owl

(*Strix occidentalis lucida*)—Threatened

## Description

The Mexican Spotted Owl is a large (16-19" tall), dark-eyed owl with brown and white spots on its front, back and head. The owl has a rounded head and lacks ear tufts. Adult and juvenile birds have similar plumage characteristics. Similar owls which occur regularly in Utah include the Great Horned Owl (*Bubo virginianus*), which has prominent ear tufts and yellow eyes, and the Common Barn Owl (*Tyto alba*), which is smaller, has a heart-shaped facial pattern, and a mostly white or tawny front.

## Distribution and Habitat

Only the Mexican subspecies of spotted owls occurs in Utah. Close relatives of the Utah owl occur in California—California Spotted Owl (*S.o. occidentalis*) and the Pacific Northwest—Northern Spotted Owl (*S.o. caurina*). In Utah, the owl is



Photo courtesy of Steve Howe.

known to nest only in steep-walled canyons of the Colorado Plateau ecoregion and adjacent portions of the Utah Mountains ecoregion. Most nesting sites occur in southern Utah, but sites have been found as far north as Dinosaur National Monument in the northeastern corner of the state. Population clusters have been identified around Zion National Park, Capitol Reef National Park, Canyonlands National Park, and the Dark Canyon complex of the Abajo Mountains.

Unlike owls in other portions of the range which nest primarily in the trees of mature conifer forests, Utah owls nest exclusively in caves in steep-walled, usually narrow, moist canyons. These canyons are typified by streamside woods, and/or narrow stringers of conifer trees though some sites are in relatively dry canyons. Canyons where nests occur are usually part of a rugged, complex canyon system which has several side canyons and hanging canyons. All known nesting sites in Utah are below 8000 feet elevation. Winter habitat is essentially the same as breeding habitat, though owls may seek warmer, more open canyons in the winter.

Owls forage primarily on the canyon floors and on elevated benches within the canyons. However, owls also occasionally forage on mesa tops which are usually covered by pinyon/juniper or shrubland habitats. Owls will forage on a variety of prey including mice, voles, bats, birds, and beetles, but their primary prey is woodrats.

## Life History

Spotted Owls are residents in Utah, though they may exhibit some movements of a few miles

during the winter. Courtship usually begins in March. Females lay 1-3 (usually 2) eggs in early to mid April and incubate the eggs for about 30 days. Males deliver food items to the females during this period. Eggs typically hatch in early to mid May, and both parents tend the young, though females spend more time defending the nestlings while males spend more time foraging. Nestlings usually fledge at 4-5 weeks old in mid to late June. After fledging, juvenile owls spend up to several months in the nest area with the adults learning to hunt. In September or October, juveniles disperse away from the nesting area. They may travel several miles during the dispersal period seeking suitable foraging and future nesting locations (owls do not breed until they are 2 years old). Adults may also undergo some movement at this time and may occasionally accompany the young owls.

During the winter, owls usually forage in the nesting area and in areas adjacent to the nesting area. Occasionally, owls will make journeys out of the nesting area to forage in areas which are warmer and have less snow cover.

## Threats and Reasons for Decline

The primary threat to Mexican Spotted Owls across their range is habitat loss because of past, current, and future timber harvest practices. Significant portions of the owl's habitat have been lost or modified from diverse, multiple layered forests, which owls prefer, to uniform forests, grasslands, and shrublands with little structural diversity. The population trend of owls is not well understood, but the current number of breeding pairs is probably sufficient to

maintain the population if habitat loss is curtailed and other potential threats are properly managed.

In Utah, potential threats to the owl include human disturbance associated with increasing recreational activities in canyon habitats, overgrazing and timber harvest in foraging areas, road development in canyons, catastrophic wild fire, and oil, gas, and mineral development. These activities may lead to habitat alteration and/or direct disturbance of owls.

## Recovery Efforts

A recovery plan for the Mexican Spotted Owl was published in 1995. It lists the steps which need to be taken to insure the long-term survival of the subspecies in Utah, other southwestern states, and Mexico. The owl's range has been divided into several recovery units, and Utah has taken the lead in implementing recovery on the Colorado Plateau Recovery Unit which extends into Arizona, New Mexico and Colorado. Implementation of the Recovery Plan in Utah and the rest of the Colorado Plateau is overseen by a team of representatives from state and federal agencies, private industry, conservation groups, and researchers.

In Utah, all known nesting areas have been mapped and receive protection from habitat destruction and activities that would disturb owls. A significant portion of the known nesting sites have been monitored for occupancy and productivity and surveys have been undertaken to identify additional areas where owls or suitable owl habitat occur. Research on Utah owls, was initiated in 1991, continues to provide information on the extent of owl distribution, habitat requirements (both winter and summer), juvenile dispersal, the size of the area used by individual owls (i.e., home range), and owl prey.

## How You Can Help

You can help by reporting the location of spotted owls to regional Utah Division of Wildlife Resources Offices; if the nest is on federal land, you can report the site to the local office of the Bureau of Land Management, National Park Service, or U.S. Forest Service. Since owls are active mostly at night, the best way to identify them is by their call—spotted owls have a four-note call which is a low, unevenly spaced “hoo—hoo-hoo—hoooo”.

If you find a dead or injured owl, contact your local Utah Division of Wildlife Resources, National Park, Bureau of Land Management, or U.S. Forest Service office. They will help recover the bird and find the nearest raptor rehabilitator if necessary. You should avoid disturbing owls, particularly young owls, since disturbance might make them vulnerable to predators.

## Where To Learn More

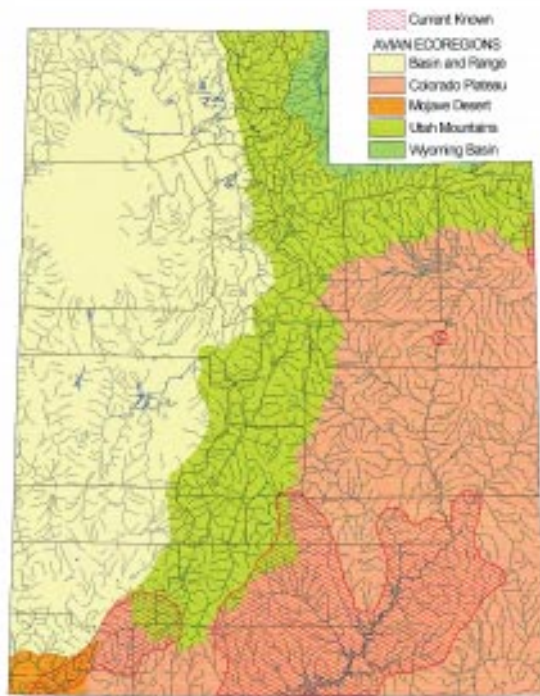
A newsletter available through the Utah Division of Wildlife Resources (The Mexican Spotted Owl Recovery Update) features the Mexican Spotted Owl and its status on the Colorado Plateau region of Utah, Colorado, Arizona, and New Mexico. Several books on owls are available at bookstores and libraries; audio tapes may also be available at these sources. Other educational materials such as video tapes and CDROMs are available through specialty (nature) bookstores and (wild) bird shops. Web sites can be found by searching for the keywords “Spotted Owls,” “owls,” “nocturnal raptors,” and “nocturnal birds of prey.”

## For More Information

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Utah Division of Wildlife Resources  
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801-538-4764

or

U.S. Fish and Wildlife Service  
Utah Field Office  
145 East 1300 South, Suite 404  
Salt Lake City, UT 84115  
801-524-5001



Mexican Spotted Owl distribution.



*Mexican Spotted Owl habitat photo courtesy of Steve Howe.*

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## References

- Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. *The Birder's Handbook*. Simon and Schuster, Inc., New York, N.Y.
- USDI Fish and Wildlife Service. 1995. *Recovery Plan for the Mexican Spotted Owl (*Strix occidentalis lucida*)*. US Fish and Wildlife Service, Albuquerque, N. Mex.