



# WILDLIFE NOTES

## Mexican spotted owl

Americans continue to see the Mexican spotted owl (*Strix occidentalis lucida*) from widely divergent viewpoints. Many see this Federally Threatened species as one that may save the Southwest's old growth forests from ultimate destruction. But others view this bird more darkly, and believe the owl and the Endangered Species Act that seeks to conserve it are unnecessarily eliminating timber harvesting jobs.

### LOCATION and POPULATION

An estimated 1,500 to 2,000 Mexican spotted owls still exist throughout North America. Closely related to the barred owl of the eastern United States, the three subspecies of spotted owl — California, northern, and Mexican — all live in the West. The range of the Mexican spotted owl extends from the southern Rockies in Colorado and southern Utah, south through Arizona and New Mexico, and into Mexico to Michoacan. In New Mexico, these owls are found primarily in the Carson, Santa Fe, Cibola, Gila, and Lincoln National forests; recent data suggest about 250 territories are occupied throughout the state.

### DESCRIPTION

Unlike most owls which are yellow-eyed, the Mexican spotted owl has large black eyes. These are framed by a black-rimmed 'valentine' of paler feathers around the eyes. Its head is round, fluffy, and 'earless,' giving it an appearance not

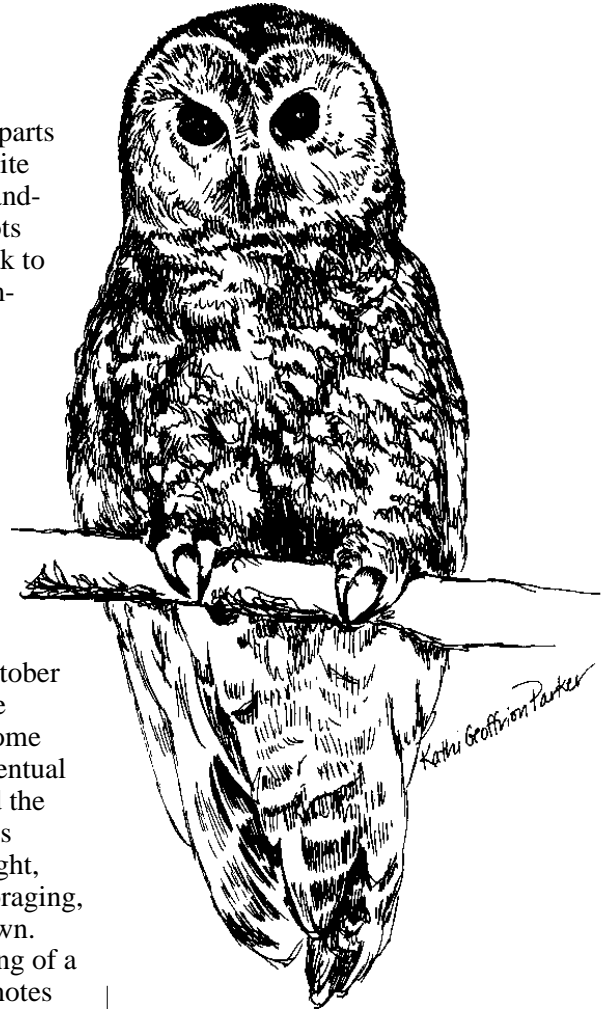
unlike a teddy bear. Its upperparts are brown with occasional white speckles. A series of brown-and-white, horizontally placed spots form a series of bars from beak to tail. It's considered a medium-sized owl at 16"-19" tall.

### BONDING and VOCALIZATION

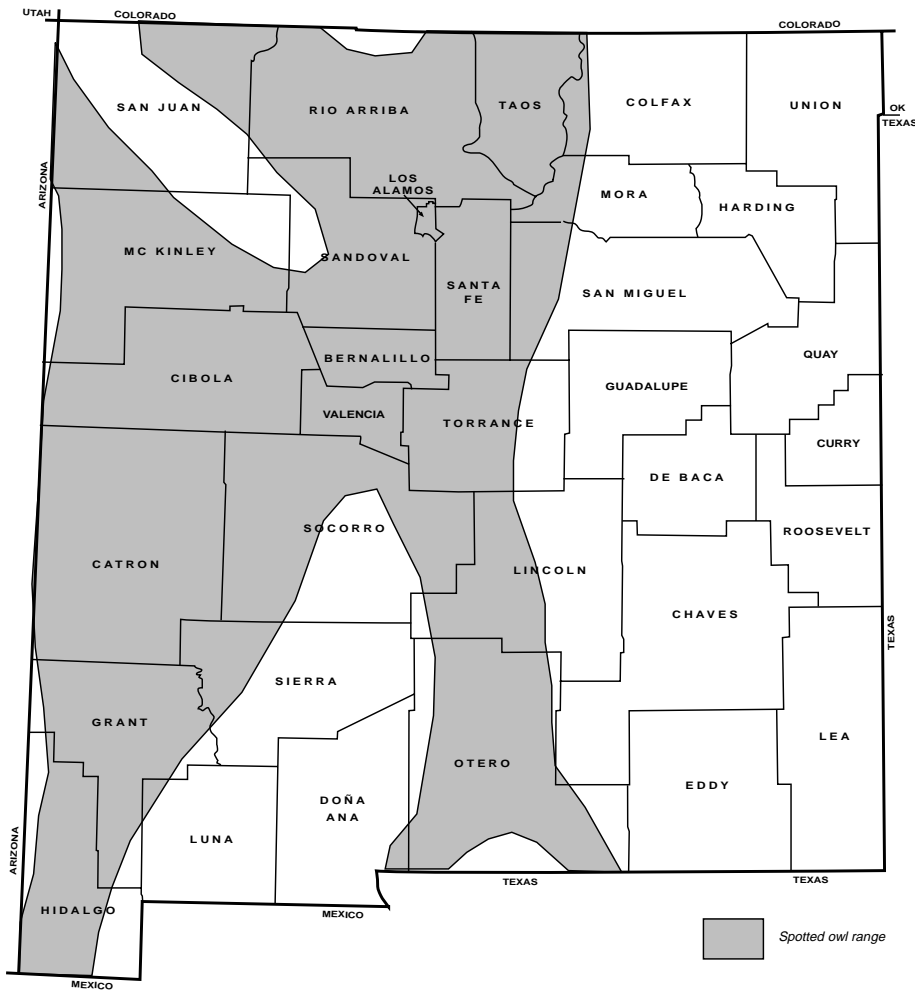
Mexican spotted owls form long-term pair bonds. Adult pairs occupy the same home range for long periods of time, probably for life. The pair tends to live a more solitary existence between October and January. However, in late February, they increasingly come together to roost near their eventual nest site, usually the nest used the previous year. The pair begins calling to one another each night, particularly at dusk prior to foraging, and again as they return at dawn. Sounding much like the barking of a small dog, the vocalized call notes usually come in groups of three: 'hoo, hoo-hoo', or five: 'whoop, are you, you-all?' Calls serve for both territorial challenge and general location. Males also utter the call when arriving near the nest with food, and before and after mating which usually occurs at dusk.

### BREEDING

Over 90 percent of all observed Mexican spotted owl nests are in large, living conifer trees in mature forests. The birds nest in cavities, on stick platforms, or on old debris piles such as mistletoe or old squirrel



nests. In New Mexico, spotted owls lay one to three white eggs usually within the first two weeks of April. Incubation continues for 28-32 days after the first egg is laid and is handled entirely by the female. Both adults help raise the young. The male typically delivers prey he has decapitated, passing the food to the female to feed the young. Once the owlets are out of the nest for about two weeks, the male sometimes delivers prey directly to them. Most young owls fledge in June, about 34-36 days after hatching, and are fully on their own by early October.



## FUTURE MANAGEMENT

The management of the Mexican spotted owl in New Mexico rests primarily with two government documents.

One of these, the U. S. Fish and Wildlife Service's recovery plan for the owl, provides management direction for modifying timber harvest practices to accommodate the owl.

The other document is the U. S. Forest Service's amendment of its current forest management plans. This amendment incorporates owl guidelines stipulated in the recovery plan which, in turn, should remove the threats to the owl from current timber practices. The direction is a move away from former 'even-age' tree harvesting practices, which are not compatible with maintaining spotted owl habitat, to practices that encourage maintenance of the diverse, multi-storied, closed-canopied forests needed by the owls. Only time will tell if these latest efforts to accommodate the needs of the spotted owl, while also continuing to provide timber harvest opportunities, will prove successful.

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## FEEDING

The Mexican spotted owl is a perch-and-dive predator. In New Mexico, its primary prey is the wood rat (*Neotoma*). It hunts by moving from tree to tree, spending from a few seconds to several hours watching and listening for prey. Prey that is not eaten immediately is sometimes cached in various places on the ground, on large rocks, or in trees. Most of the day is spent roosting, but sometimes owls dive down to capture prey beneath roost trees, make flights to retrieve cached prey, or fly to nearby streams to drink or bathe.

## CURRENT CONTROVERSY

Why is the Mexican spotted owl at the center of this ecological storm? Is it dying out? Not yet. However, it's in grave danger, because the owls live in forests which are slated for vigorous logging in the near future.

This species is a biological indicator of 'old growth' habitat. It cannot survive unless it lives in mature, unlogged, mixed conifer forests where trees may be more than 200 years old. Mexican spotted owls consistently avoid 'managed' forests. In New Mexico, old growth may be found in canyons and on steep slopes.

Under the National Forest Management Act, the U. S. Forest Service is obligated to maintain 'minimum viable populations' of all vertebrate species on its lands; at the end of 1990, about 90 percent of all known Mexican spotted owls were found within National Forest boundaries. Citing the threat to this owl from past and projected habitat loss, the U.S. Fish and Wildlife Service listed the Mexican spotted owl as a Threatened Species in 1993.

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