urrowing owls, once found in open, dry grasslands from southern Canada to the Great Plains and as far south as South America, have disappeared from much of their historic range. In the Canadian prairie provinces, their numbers have dropped by more than half in the last decade, and in North Dakota and western Montana they are virtually gone. An estimated 750 to 850 pairs still nest in the eastern two thirds of Montana. Concerned citizens and government agencies are starting to work together to save the species.

Burrowing owls nest in the ground in the deserted shelters of small mammals. In Montana, burrowing owls live side by side with black-tailed prairie dogs, occupying about 40 percent of the state's prairie dog towns. Efforts to eradicate prairie dogs have taken a toll on the owl population. Agricultural development and pesticides have also reduced the owls' numbers.



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conserving the Burrowing Oul

Some 50 percent of the burrowing owls in Montana nest on private lands, making landowners key to the owls' survival. Maintaining contiguous tracts of native prairie on farms and ranches is the most important thing landowners can do to help the species survive.

Identification

Burrowing owls weigh only five or six ounces and are about ten inches tall. They have long legs and brown and black spots. They are often seen perched on fenceposts or on the ground in the daytime. At night their call sounds similar to a mourning dove but it is higher pitched.

Habitat

Burrowing owls require open areas with low ground cover. They nest in the abandoned burrows of small mammals, such as prairie dogs and ground squirrels. The owls line their homes with plants or dried cow manure, which absorbs moisture, attracts dung beetles to eat and helps keep the burrow warm. Sometimes they settle in burrows near livestock water tanks and old lumber piles on farmsteads. They migrate to a warmer climate in October. Montana's owls winter from Texas to California and northern Mexico. They return between March and May.

Breeding

Burrowing owls often nest in loose colonies about 100 yards apart. They lay three to 12 eggs from mid-May to early June. The female incubates the clutch for about 28 days while the male supplies her with food. The young begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days.

Diet

Burrowing owls mostly eat small mammals such as voles and mice during late spring and early summer. Later they switch to insects, especially grasshoppers and beetles. They also eat birds, amphibians and reptiles. Unlike most other owls that hunt only at night, burrowing owls also hunt during the day.

What you can do to help conserve Montana's burrowing owls:

• Allow prairie dog colonies on your land. Owls and prairie dogs have a symbiotic relationship. When prairie dogs abandon their colonies, the owls soon follow.

• Allow grazing on areas that otherwise would support tall vegetation, as owls prefer low ground cover.

• Allow occasional heavy grazing on saline, gravelly, stony or sandy areas.

• Use rotational grazing in heavily grazed areas to increase prey populations.

• Preserve, restore or enhance areas with taller vegetation within a half-mile of owl nests to provide habitat for prey.

• Plant permanent vegetation strips in heavily cultivated areas to increase habitat for rodents and small birds. Use native seed mixtures to enhance species diversity.

• Place simple, two-foot-tall wooden perches near burrows to attract owls.

• Conserve burrowing mammal populations such as prairie dogs, ground squirrels, badgers and cottontails. Consider providing artificial burrows where these mammals are uncommon or declining.

• Where prairie dogs must be controlled, use nonlethal methods such as trapping and relocating. If poison is used, make sure owls are not present (November to March). Pellets and feathers are signs of owls.

• Don't use insecticides. If you must, wait until after mid-August when the young owls have left their parents'

care. Choose insecticides with low toxicity to wildlife that do not persist in the environment.

• Maintain a half-mile buffer zone around owl burrows for insecticide applications, rodent control and other human disturbances.

• If guns are used to control prairie dog populations, stay a half-mile away from active owl nests. Make sure shooters can recognize the owls and limit the activity to midday when owls are less active. For every hour of shooting take a two-hour break so owls can forage.

Many of these conservation measures are also beneficial to other prairie bird species in Montana such as hawks, eagles, falcons, mountain plovers, long-billed curlews, Sprague's pipits, longspurs, snow buntings and horned larks.

If you have burrowing owls on your land and want to discuss conservation methods or receive plans for artificial burrows, please call or write:

> Eric Atkinson, Marmot's Edge Conservation 4580 East Baseline Road Belgrade, MT 59714 406-586-1585 sawwhet@mcn.net

or

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