

# Manitoba's Species At Risk

Endangered



Any native Manitoba species threatened to disappear through all or most of its Manitoba range. Endangered species are declared as such by regulation under the *Endangered Species Act*.

## Burrowing owl

*Athene cucularia*

The Burrowing owl (*Athene cucularia*) is a provincially and nationally Endangered grassland bird. It has a 'typical owl' appearance, with a rounded head and large eyes, but it has an atypical habit of nesting below ground, using abandoned ground squirrel, badger or fox burrows. Burrowing owls are active day and night, but do most of their hunting at dawn or dusk. Prey items include grasshoppers, beetles and other insects, as well as mice, voles and occasionally small birds and toads.

Burrowing owls are similar in size to pigeons. Males and females are alike in appearance, although males are slightly larger and often darker coloured. Adults are primarily brown with white flecking on top and horizontal barring on their underside, providing excellent camouflage in their prairie habitat. Young birds have an unbarred, buff-coloured underside. White facial markings and a white chin stripe are prominently displayed during courtship. The ground nesting Short-eared owl is often mistaken for a Burrowing owl. However, Short-eared owls are larger, have a vertically streaked underside, and are usually found in taller grass or near haylands, rather than the shorter grass pastures and prairies preferred by Burrowing owls.

### Habitat

Burrowing owls are found in flat to gently rolling treeless pasture and prairie, especially grasslands containing abandoned burrows suitable for nesting, roosting and caching food. Permanent grass cover is required to support its prey. Pasture lands are the most commonly used habitat in Manitoba, but they have also been found nesting in ditches, croplands, golf courses and even on manicured lawns.

### Life History

Burrowing owls return to nesting territories in Manitoba in early to mid-May, with courtship and nesting beginning soon afterwards. An abandoned burrow is usually chosen and modified by the pair, who use their feet and

beaks to scrape out an underground tunnel and nesting chamber. The burrow and entrance are lined with dried bits of cow manure, plants and feathers to help moderate the temperature and mask their scent. Nesting pairs can be found in isolation, or nesting together in loose colonies.

Females lay four to twelve white eggs and incubate them for about four weeks while the males provide food. Newly hatched owlets start emerging from the burrow to be fed when they are at least two weeks old. Later, broods are often split up into two or three burrows to avoid crowding and to reduce chances of predation or disease. At seven to eight weeks of age, the young begin to hunt for themselves. By August or September, family groups split up and individuals roam further afield, eventually migrating south to their wintering grounds.

### Distribution

The Burrowing owl occurs in the prairies of western North America, as well as portions of Central and South America. Although wintering areas of Canadian birds are not fully known, most are believed to migrate to the southwestern United States and Mexico.

In Canada, Burrowing owls are most commonly found in a belt from Regina, Saskatchewan to Brooks, Alberta, but some nest as far east as south-central Manitoba and as far west as the interior of British Columbia. Historically, the Burrowing owl was found in southern Manitoba, north to Dauphin and the Interlake and east to Winnipeg. Today, they generally occur only in the extreme southwestern corner of Manitoba, with occasional sightings further north and east.

### Status

The Burrowing owl has been assigned a rank of very rare (S1) by the Manitoba Conservation Data Centre, but is considered secure (G4) throughout its range by NatureServe. In Manitoba, the number of breeding pairs has declined from hundreds during the early to mid-1900s, to less than ten breeding pairs in recent years.



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## Cool Facts

Adult Burrowing owls weigh between 125 and 185 grams – about the same as an orange.

Burrowing owls are often seen perching at the entrance to their burrow, or on nearby fence posts.

If an intruder enters the burrow, trapped adult or juvenile owls inside the nest will issue an alarm call that sounds like a rattlesnake. Adults will also try to lure intruders away from the burrow with a series of calls and short, distracting flights.

Burrowing owls associate with, and from a distance look similar to, ground squirrels (gophers). This leads to some being mistakenly shot or poisoned during control programs.

Burrowing owls may breed when they are a year old, and can raise up to nine young per year. Birds may live up to 14 years, but most survive less than five years.



The Burrowing owl was listed as Endangered in 1992 by regulation under Manitoba's *Endangered Species Act*. It is listed as Endangered in Canada by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and is also protected under the federal *Migratory Birds Convention Act*.

Burrowing owls face numerous threats throughout their nesting and wintering range, including loss of habitat due to agricultural and urban expansion, decreased prey abundance due to pest control and habitat changes, and increased mortality and decreased productivity due to predation by snakes, owls, hawks, badgers, skunks, foxes, weasels, cats and dogs. Decreasing numbers of available burrows may also be a factor, as ground squirrels, badgers and prairie dogs are considered agricultural pests and their numbers have been severely reduced in many areas.

### Stewardship and recovery

Canada's four western provinces all provide protection for Burrowing owls, and government and non-governmental agencies work together on a National Recovery Team to help maintain or increase the number of breeding pairs in Canada.

Management activities in Manitoba since the mid-1980s have focussed on increasing our knowledge of limiting factors, reintroductions, habitat securement, provision of artificial

nest burrows and raising public awareness. Releases of Burrowing owls were undertaken in Manitoba between 1987 and 1996, mostly with birds from captive-rearing facilities. Although a number of released birds mated and produced young, releases were eventually discontinued because of poor return rates and continuing overall declines.

Of 181 nests monitored in Manitoba from 1987 to 1996, over two-thirds were successful in producing young. However, only 4 per cent of the young and 31 per cent of the adults ever returned to Manitoba, suggesting mortality on migration routes and in wintering areas may be contributing to recent declines.

### Get involved in recovery

If you see a Burrowing owl on your property, congratulations! Your land management skills are helping support one of Manitoba's rarest animals. Please contact Manitoba Conservation at one of the numbers below to find out how you can increase its chances of nesting successfully and returning, and to enhance your land for other native Manitoba plant and animal species. This could include maintaining pasture lands with adequate populations of burrowing mammals to provide nesting habitat and burrows, and avoiding excessive use of insecticides and poisons that kill a variety of non-target species which may provide food for Burrowing owls.

**Manitoba Conservation  
Wildlife and Ecosystem Protection Branch**  
Box 24, 200 Saulteaux Crescent  
Winnipeg MB R3J 3W3  
(204) 945-7775

[www.gov.mb.ca/natres/wildlife/index.htm](http://www.gov.mb.ca/natres/wildlife/index.htm)

### Manitoba Conservation Regional Office

Western Region  
Brandon  
(204) 726-6450

**Partners in production of this fact sheet:**  
Manitoba Conservation,  
Wildlife and Ecosystem Protection Branch  
Environment Canada, Canadian Wildlife Service  
Manitoba Habitat Heritage Corporation

#### Extirpated Species

Any species once native to Manitoba that has disappeared through all of its Manitoba range. Extirpated species are declared as such by regulation under the *Endangered Species Act*.

#### Endangered Species

Any native Manitoba species threatened to disappear through all or most of its Manitoba range. Endangered species are declared as such by regulation under the *Endangered Species Act*.

#### Threatened Species

Any native Manitoba species likely to become endangered or at risk due to low or declining numbers in Manitoba if the factors affecting it don't improve. Threatened species are declared as such by regulation under the *Endangered Species Act*.

#### Vulnerable Species

Species not regulated under the *Endangered Species Act* but which could eventually be considered Endangered or Threatened if the factors affecting them do not improve.