

Burrowing Owl



Parks & Open Space

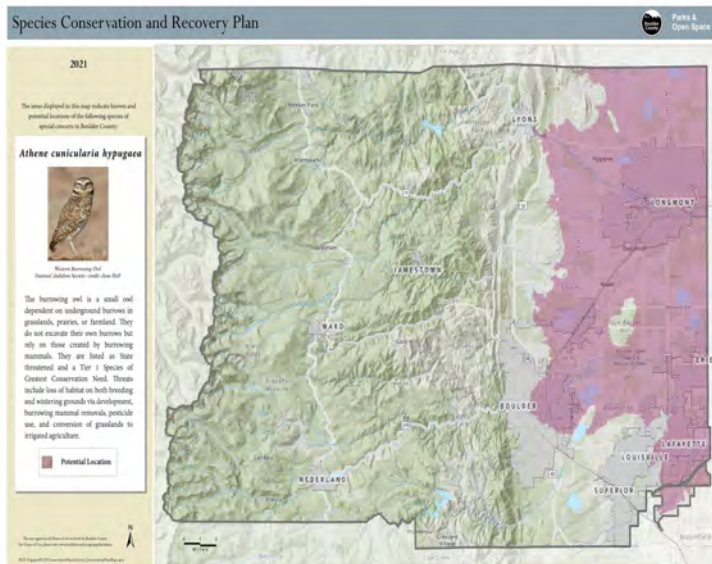
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Figure 1: Adult burrowing owl bringing food back for chick.
Credit William Kleinfelder

<http://www.hww.ca/en/wildlife/birds/burrowing-owl.html>

Distribution & Range



Species Description

Species: Western burrowing owl (*Athene cunicularia hypugaea*)

Identification: Burrowing owls are small, compact raptors with round heads and long legs. They often stand on fenceposts or near their burrows. They have earthy brown feathers with sandy or tawny spots and are overall lighter on their undersides. They have large, lemon-yellow eyes under a pale or white brow. Burrowing owls' wings are broad and round with the same brown/tawny-spotted coloration as the body. Males are often slightly larger and lighter in coloration compared to females.

Lookalikes: Burrowing owls can be confused with other small raptors, such as the American kestrel, or with similarly-sized birds, such as the western meadowlark.

Habitat: Burrowing owls occupy existing or historical prairie dog colonies in shortgrass prairie or farmland areas. High quality habitat for burrowing owls consists of some wetland or nearby water source and adequate grassland vegetation to support prey populations.

Background

Burrowing owls are underground-dwelling birds that live inside prairie dog burrows. They migrate south in early fall and return to Colorado's shortgrass prairies in mid-March to early April. Burrowing owls are active during the day (diurnal), when they hunt insects, rodents, and occasionally small birds. Adults will bring dried dung to their burrows to mask the scent of their young from above-ground predators, as well as to attract insects to the burrow.

Threats

Widespread agricultural practice alters the land in several ways—one of the most impactful being prairie dog removal. Removal of these iconic excavating rodents for agriculture and livestock rearing negatively impacts the owls. Burrowing owls are secondary burrow-nesters, meaning they rely on prairie dogs to excavate burrows in suitable habitats since they cannot do it themselves.

As a ground-dwelling species, burrowing owls are sensitive to human encroachment. If a burrowing owl is uncomfortable with the amount of human activity (be it recreation, agricultural equipment, vehicular activity, etc.), they may abandon a nest site to either try again in another location or forego breeding in a season altogether.



Figure 3: Juvenile western burrowing owl.

By *On the Wing Photography*, credit: Mia McPherson
<https://www.onthewingphotography.com/wings/2015/07/01/a-bundle-of-western-burrowing-owls/>

Disclaimer: This summary is not a complete guide to conservation and/or recovery of the species. For more information, please read the full report on our website.



Figure 2: Adult western burrowing owl (*Athene cunicularia hypugaea*) next to a black-tailed prairie dog (*Cynomys ludovicianus*)

By USFWS, credit: Bennette Jenkins

https://www.fws.gov/refuge/maxwell/what_we_do/partnerships.html

Management Considerations

There are a handful of useful management options when burrowing owls are detected in an area. Since total removal of prairie dogs negatively impacts the burrowing owls, closely monitored prairie dog removals have been adopted in many areas with burrowing owls. Based on the area of prairie dog-occupied land, biologists will help determine an acceptable population number of prairie dogs to remain on the property to lessen their impacts on the surrounding vegetation (especially when the owls are located on agricultural land). Continued monitoring of the prairie dogs is necessary to ensure the population does not exceed the agreed upon number on the property.

Nest buffers are also set in place to limit the amount of human or vehicular encroachment the owls will experience. The land within this buffer is essentially inaccessible until the owls have been observed leaving the nest site, hopefully with grown juveniles in the fall as they migrate south.

Habitat preserves also provide a great opportunity for the burrowing owls to nest with little to no disturbance. Government or local entities appoint certain properties as habitat preserves to help reduce fragmentation of suitable habitat for species like the burrowing owl.

2021


The areas displayed in this map indicate known and potential locations of the following species of special concern in Boulder County:

Athene cunicularia hypugaea



Western Burrowing Owl
National Audubon Society- credit -Jean Hall

The burrowing owl is a small owl dependent on underground burrows in grasslands, prairies, or farmland. They do not excavate their own burrows but rely on those created by burrowing mammals. They are listed as State threatened and a Tier 1 Species of Greatest Conservation Need. Threats include loss of habitat on both breeding and wintering grounds via development, burrowing mammal removals, pesticide use, and conversion of grasslands to irrigated agriculture.

 Potential Location

