

# Short-eared Owl



ASSESSING HABITAT QUALITY FOR PRIORITY WILDLIFE SPECIES IN COLORADO WETLANDS

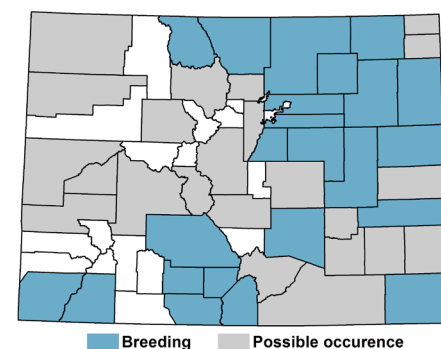


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## Species Distribution

### Range

Short-eared owls exist throughout much of the world. In Colorado, both their breeding distribution and migratory distribution appear sporadic, but in general, they are more common in the grasslands of eastern Colorado.



North America map used by permission from Cornell Lab of Ornithology's Birds of North America Online (<http://bna.birds.cornell.edu/bna>). Colorado map based on Andrews and Righter (1992), Kingery (1998), COB-BAIL (2015), and CFO (2015).

Short-eared owls (*Asio flammeus*, Family *Strigidae*) use both grasslands and wetlands for habitat. They hunt small mammals within the vegetation of wet meadows and marshes.

## Species Description

### Identification

At 15 inches long, the short-eared owl is considered a medium-sized owl. They hunt mostly at dawn and dusk and nest on the ground. They have a wide array of vocalizations, including a rapid *hoo-hoo-hoo-hoo-hoo-hoo* song.

### Preferred Habitats

Short-eared owls use emergent marshes, playas, and wet meadows, where they sometimes hunt. Extensive grasslands may represent their most important habitat; therefore, the wetland habitats closest to large tracts of grasslands will be of highest value to short-eared owls.

### Diet

The diet of short-eared owls consists almost entirely of small mammals, especially voles, mice, and shrews. Less frequently, they eat birds.

### Conservation Status

Although populations of short-eared owls have significantly declined in many areas, including the United States and Canada, the International Union of Conservation of Nature identifies them as a species of least concern because the large global population and extensive range do not justify placing them in a more vulnerable category. In Colorado, they are listed as a Tier 2 Species of Greatest Conservation Need (CPW 2015).

# Preferred Habitat Conditions

Dominant vegetation	grasses
Height of vegetation	<20 inches
Landscape context	mosaics of grasslands, agricultural fields, and preferred wetlands
Percent herbaceous cover	70–100%
Residual cover	2–8 years old and 40–60%
Size of habitat	>125 acres
Water depth	0 for nest sites

## Management Recommendations

This fact sheet contains easy-to-use guidelines for understanding habitat needs of Colorado Parks and Wildlife priority wetland-dependent wildlife. A number of practical steps can be taken to improve habitat for short-eared owls.

### Vegetation

- Mow, burn, or occasionally graze as appropriate to maintain 2–8 years of accumulation of residual vegetation.

### Land Use

- Reduce amount of land continually grazed.
- Hang streamers from fences to avoid collisions.
- Remove unused fences.

### Conservation

- Protect large open areas, especially native grassland.
- Preserve wetland/grassland mosaic on landscape scale.
- Use Conservation Reserve Program to protect habitat for nesting and foraging.



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### Acknowledgements

Rick Schnaderbeck (U. S. Fish and Wildlife Service) reviewed an earlier version and provided input on preferred habitat conditions.

### Suggested Reading and Citations

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# Habitat Scorecard for Short-eared Owl (v. Jan 2016)

## Assessment of habitat before and after restoration or management actions

Project Name: \_\_\_\_\_ Date(s) of Assessment: \_\_\_\_\_

**Instructions:** Enter one value that best describes early to mid-summer conditions of each habitat variable, using the numbers in the value column. Habitat variables are in shaded boxes; ranges of condition are directly below each variable. If condition is outside range or is not described, enter a zero.

Key habitat variable and conditions	Value	Before	After
<b>Height of herbaceous vegetation</b>			
8 – 20 inches	15.9		
>20 – 40 inches	10.6		
>40 inches	5.3		
<b>Estimate of percent of grasslands or grasslands with some agriculture within 5 miles</b>			
>35%	15.9		
<35%	5.3		
<b>Percent herbaceous vegetation (e.g., grasses; do not include woody vegetation)</b>			
>70 – 100%	15.9		
>50 – 70%	10.6		
30 – 50%	5.3		
<b>Percent residual cover</b>			
>40 – 60%	14.3		
>20 – 40%	9.5		
10 – 20%	4.8		
<b>Size of habitat</b>			
>250 acres	14.3		
>125 – 250 acres	9.5		
60 – 125 acres	4.8		
<b>Dominant vegetation</b>			
Grasses (tall and short)	11.9		
Open canopy trees <50% cover	7.9		
<b>Predominant depth of water</b>			
0 or dry nesting sites with residual cover available	11.8		
<1 inch	7.9		
1 – 8 inches	4.0		
<b>Total (of 100 possible): add all numbers in before or after columns</b>			