

Sandhill Crane



ASSESSING HABITAT QUALITY FOR PRIORITY WILDLIFE SPECIES IN COLORADO WETLANDS



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Sandhill cranes (*Grus canadensis*, Family *Gruidae*) are impressive birds with a wide wingspan, red eye patch, and loud trumpeting call.

Species Description

Identification

With a length of 3½–4 feet and wingspan of 6–7 feet, sandhill cranes are hard to miss, but they are sometimes mistaken for great blue herons. Their graceful dancing helps establish and maintain pair bonds, which last a lifetime, and their warbling or trumpeting calls can be heard from a mile away.

Preferred Habitats

Sandhill cranes occupy numerous wetland habitats, including emergent marshes, seeps and springs, wet meadows, moist soil units, playas, reservoirs, and streams. They rely heavily on grain crops; therefore, wetlands close to crops are preferred.

Diet

During migration, sandhill cranes depend on corn and other grains, such as wheat, barley, and oats. Other food

items include snails, crayfish, insects, roots, tubers, small vertebrates, and waterfowl eggs.

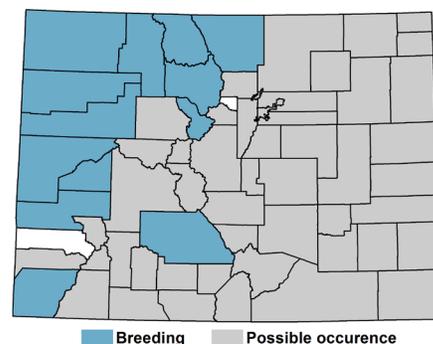
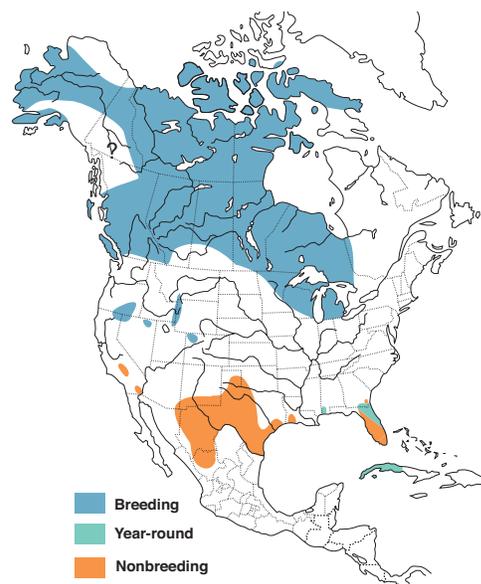
Conservation Status

There are several subspecies of sandhill crane. The greater sandhill crane (*G. c. tabida*), listed as a Tier 1 Species of Greatest Conservation Need in Colorado (CPW 2015), winters primarily in New Mexico, with spring and fall stopovers in the San Luis Valley of Colorado. *Grus c. canadensis* migrates through the eastern plains of Colorado. Although two other subspecies (*G. c. pulla* and *G. c. nesiotis*) are Federally endangered, sandhill crane populations appear to be stable or increasing in most areas. In Colorado, breeding records were confirmed in 40% more priority blocks during the second Colorado Breeding Bird Atlas (2007–2011) than the first atlas (1987–1994), suggesting they use more areas for breeding than was known historically.

Species Distribution

Range

Sandhill cranes breed in a variety of northern regions, including northwestern Colorado. During migration, sandhill cranes can occur almost anywhere in 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-BAT (2015), and CFO (2015).

Preferred Habitat Conditions

Distance from shore where water is 4–8 inches deep	50–100 yards
Dominant vegetation	open water in roosting wetlands; low grasses, annual forbs and crop plants in foraging wetlands
Habitat size	>2.5 acres
Height of vegetation	<3.3 feet
Percent emergent cover in roosting wetlands	0–20% (open view and little to no emergent vegetation)
Percent herbaceous cover in foraging wetlands	80–100%
Water depth (predominant)	4–8 inches in roosting wetlands; 0 or hummocks in foraging wetlands

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 sandhill cranes.

Hydrology

- Manage hydrology to maintain adequate width and depth (4–8 inches deep) for roosting.
- Maintain flowing water to prevent spread of disease.

Vegetation

- Maintain availability of vegetation that produces food.
- Control woody vegetation where needed, especially along shorelines.
- Maintain wetland vegetation at early seral stage.
- Control encroaching coarse emergent vegetation (e.g., cattail, bulrush).
- Use appropriate cattle grazing or fall burning to maintain grass height <10 inches.

Land Use / Other

- Maintain juxtaposition of roosting and feeding sites within 2.5 miles.
- Discourage land use changes that reduce availability of small grains.
- Provide grit (e.g., pebbles and small gravel) at roost sites if needed.
- Remove unused fences, towers, and utility lines.
- Avoid development of new roosting habitat adjacent to dangers (e.g., utility lines).

Conservation

- Monitor harvest rate; adjust as needed to maintain desirable population numbers.
- Form and maintain partnerships between agencies and agricultural producers.



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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 Sandhill Cranes (v. Jan 2016)

Assessment of habitat before and after restoration or management actions

Project Name: _____ Date(s) of Assessment: _____

Instructions: Select appropriate checklist: (1) **Roosting** (e.g., emergent marshes, playas, moist soil units, reservoirs) or (2) **Foraging** (e.g., emergent marshes, wet meadows, moist soil units, recharge ponds). 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.

Roosting Habitat (e.g., emergent marshes, playas, moist soil units, reservoirs)

Key habitat variable and conditions	Value	Before	After
Predominant depth of water			
>4 – 8 inches	23.1		
>8 – 12 inches or 2 –4 inches	15.4		
Percent of emergent vegetation			
0 – 20%	20.8		
>20 – 40%	13.9		
>40 – 100%	6.9		
Distance from shore where water is 4–8 inches deep			
>55 – 165 yards	19.6		
>25 – 55 yards	13.1		
15 – 25 yards	6.5		
Dominant vegetation			
Open (little to no vegetation)	18.5		
Grasses	12.3		
Interspersion			
A	9.0		
B or C	6.0		
D	3.0		
Interspersion patterns refer to the above diagram (stippled = water, solid = vegetation)			
Size of habitat			
>2.5 acres	9.0		
<2.5 acres	3.0		
Total (of 100 possible): add all numbers in before or after columns			

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Foraging Habitat (e.g., emergent marshes, wet meadows, moist soil units, recharge ponds)

Key habitat variable and conditions	Value	Before	After
Dominant vegetation			
Low grasses, annual forbs, and crops	20.8		
Size of habitat			
> 2.5 acres	20.8		
< 2.5 acres	6.9		
Percent of herbaceous vegetation (no woody plants)			
>80 – 100%	19.8		
>60 – 80%	13.2		
30 – 60%	6.6		
Predominant depth of water			
0 or hummocks	19.8		
Height of herbaceous cover			
8 – 20 inches	18.8		
>20 – 40 inches	12.5		
>40 inches	6.3		
Total (of 100 possible): add all numbers in before or after columns			