

Sandhill Crane

Grus canadensis

Class: Aves **Order:** Gruiformes (coots, cranes & rails) **Family:** Gruidae (cranes)

Other names: none

Other subspecies: Six subspecies have been recognized: lesser sandhill crane (*G. c. canadensis*); Florida sandhill crane (*G. c. pratensis*); Cuban sandhill crane (*G. c. nesiotus*); Mississippi sandhill crane (*G. c. pulla*); Canadian sandhill crane (*G. c. rowani*); and Greater sandhill crane (*G. c. tabida*)

Other Relatives: There are ten species of crane listed in the genus *Grus*



Zoo Sandhill Crane 1.0.0

'Sandy' 0.1 – male

DOH: approximately 2007 AQ: 11/29/2007

About Sandy

Sandy was blown off course as a juvenile and taken into wildlife rehabilitation at Tristate Bird Rescue. Due to imprinting at a young age, he was unable to be released. He weighs between 7.5-9 lbs.

Status

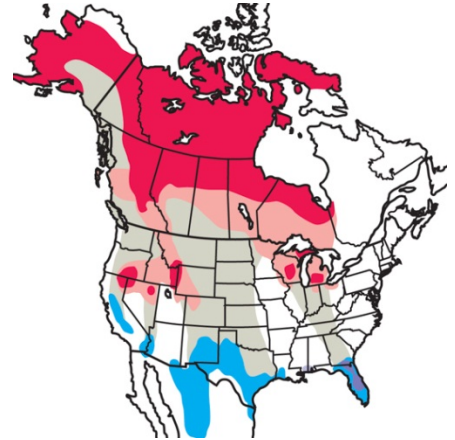
Not Assessed by IUCN

Though sandhill cranes are not considered threatened as a species, the three southernmost subspecies are quite rare. [1]

Geographic Region

In North America, this species breeds as far north as Alaska and the Arctic coast of Canada south into the Great Lakes region and westward across Idaho, Nevada and Oregon. It also breeds in the extreme southeastern United States and Cuba, as well as extreme northeastern Siberia.

Peak abundance at migratory stopover points is on the Great Plains. [1]



Habitat

Prairies, fields, marshes, tundra. Habitat varies with region, but usually nests around marshes or bogs, either in open grassland or surrounded by forest. Northernmost birds nest on marshy tundra. In migration and winter, often around open prairie, agricultural fields, river valleys. [1]

Characteristics

Size: *Height:* 80-122 cm (2' 7"-4') [2] *Wingspan:* 1.65 to 2.29 m (5 ft 5 in to 7 ft 6 in) [2] *Weight:* males-4.57kg (10.1lb) females-4.02kg (8.9lbs) [2] Sizes vary among subspecies.

Longevity: Wild 20 years or more

Captivity

Physical Description

- Sandhill cranes are large birds with football-shaped bodies and long necks and legs.
- They are uniformly grayish, with a white cheek and a bald red crown.
- In flight, their long dark legs trail behind, and their long necks keep straight. [2]
- Sandhill cranes can be distinguished from other large wading birds in flight by their outstretched neck, and their wingbeats, which are a slow downward beat followed by a quick upward flick.
- Adults are gray overall; during breeding, their plumage is usually much worn and stained, particularly in the migratory populations, and looks nearly ochre. [2]

Dimorphism

Males: larger than females, otherwise sexes look alike

Females:

Diet: Omnivore

Diet in the Wild: Sandhill cranes use their bills to probe for subsurface food and glean seeds and other foods. These birds feed on land or in shallow marshes with vegetation. Foods vary depending on what is available: insects, roots of aquatic plants; also eat rodents, snails, frogs, lizards, snakes, nestling birds, berries, seeds. May eat large quantities of cultivated grains when available [1].

Diet in the Zoo: crane pelleted diet, mixed fruits & vegetables, various proteins such as fish, bird of prey diet, mice

Behavior

- *Diurnal*, day active

Locomotion & Migration

- Migratory; Northern populations move south during the winter months whereas southern populations remain near the breeding sites year round. Cranes are usually found in pairs and family groups.
- Their large wingspans make them excellent soaring birds, similar in style to hawks and eagles. Using thermals to obtain lift, they can stay aloft for many hours, requiring only occasional flapping of their wings and consequently expending little energy. Migratory flocks contain hundreds of birds, and can create clear outlines of the normally invisible rising columns of air (thermals) they ride. [2]
- Each spring most sandhill cranes fly from the southern United States and northern Mexico area to nesting grounds in the northern regions of North America or even as far as north eastern Siberia. To successfully breed and produce healthy young birds these cranes need to stop in the middle of their migration to rest, eat, socialize, mate, and build their strength for their long flight north. The Platte River region in Nebraska is their main destination for this stopover – a gathering area for up to 500,000 birds. The birds will gain up to 20% of total body weight during their stopover. [3]

Social Structure & Communication

- Sandhill cranes are fairly social birds that usually live in pairs or family groups through the year. During migration and winter, non-related cranes come together to form "survival groups" which forage and roost together. Such groups often congregate at migration and winter sites, sometimes in the thousands. [2]
- This species is noted for its elaborate courtship displays. Five courtship displays have been identified as part of "dancing," the primary mechanism of pair formation in this species. Courtship includes elaborate "dance," with birds spreading wings, leaping in air while calling. [1]
- The sandhill crane is well known for its elaborate and energetic dancing and its distinctive calls. The dance is done by two cranes together – one male, one female – with equal energy and vocalizations from both cranes. The dance starts with deep bows by both cranes. The male crane throws back his head onto his body and gives a deep call. The female then puts her head back about 45 degrees and make a higher-pitched call or two. Both cranes then perform leaps into the air, run and jump, skip and flap their wings, bow, and toss sticks or grass, all the while calling out to each other. This goes on for several minutes at a time. This dancing is considered a mating ritual, but it is performed many times throughout the year by sandhill cranes of all ages. It is thought that dancing is a stress-relieving activity that reduces aggressive behavior and strengthens the bond between pair bonded cranes. [3]
- These cranes frequently give a loud trumpeting call that suggests a French-style "r" rolled in the throat, and they can be heard from a long distance. Mated pairs of cranes engage in "unison calling." The cranes stand close together, calling in a synchronized and complex duet. The female makes two calls for every one from the male. [2]
- A soft call called a contact call is used by cranes to keep track of each other when they cannot see each other in tall vegetation. Another soft call is made by unborn cranes from inside the egg, to which the adults respond with a purring sound. [3]
- The unison call is a distinctive call and dance performed by many crane species. This is a synchronized duet and dance performed by a pair bonded couple [3].

Reproduction

- In non-migratory populations, laying begins between December and August. In migratory populations, laying usually begins in April or May. [2]
- Breeding pairs remain together from year to year, maintaining the pair bond by performing courtship displays, remaining in close proximity, and calling together in unison.
- Nest site is among marsh vegetation in shallow water (sometimes up to 3' deep), sometimes on dry ground close to water. Nest (built by both sexes) is mound of plant material pulled up from around site; nest may be built up from bottom or may be floating, anchored to standing plants. [1]
- Usually 2 eggs are laid, sometimes 1, rarely 3. They are variably pale olive to buff, marked with brown or gray. Incubation is done by both sexes, 29-32 days. Female does more of the incubating (typically all night, part of day) [1]
- Chicks are **precocial**; they hatch covered in down, with their eyes open and able to leave the nest within a day.
- Sandhill cranes raise one brood per year. [2]
- Young leave the nest within a day after hatching and will follow parents in marsh. Both parents feed young at first, but they gradually learn to feed themselves. [1] Parents will brood the chicks for another 3 weeks after hatching. [2]
- Age at first flight about 65-75 days. Young will remain with parents for 9-10 months, accompanying them in migration. [1]

Conservation

- **Use & Trade:** The Florida sandhill crane was used in an effort to facilitate an attempted reintroduction of the Whooping Crane (*Grus americana*) into Florida. [2]
 - Sandhill cranes were tried as foster parents for whooping cranes in reintroduction schemes. This failed when the whooping cranes imprinted on their foster parents, then later did not recognize other whooping cranes as their conspecifics, and unsuccessfully tried to pair with sandhill cranes instead. [1]
- **Threats:** Some migratory populations of sandhill cranes face population threats due to interspecies competition with snow geese [1]
- **Predators:** foxes, raccoons, coyotes, wolves, bobcats and lynx often hunt them. Corvids, such as ravens and crows, and smaller raptors like hawks feed on young cranes and eggs. Cranes of all ages are hunted by eagles, large owls and Peregrine falcons.

Sandhill cranes defend themselves and their young from aerial predators by jumping and kicking. For land predators, they move forward, often hissing, with their wings open and bill pointed. If the predator persists, the crane stabs with its bill (which is powerful enough to pierce the skull of a small carnivore) and kicks.

Did You Know?/Fun Facts

- The common name of this bird refers to habitat like that at the Platte River, on the edge of Nebraska's Sandhills on the American Plains. This is the most important stopover area for up to 450,000 of these birds migrating through annually.

Glossary: List of definitions of the most important recurrent technical terms used in the text.

Precocial - hatched or born in an advanced state and able to feed itself almost immediately.

References

[1] Encyclopedia of Life, "Grus canadensis," Encyclopedia of Life, 2015. [Online]. Available: <http://eol.org/pages/1049272/overview>. [Accessed February 2015].

[2] Audubon, "Sandhill Crane," Audubon, 2015. [Online]. Available: <https://www.audubon.org/field-guide/bird/sandhill-crane>. [Accessed February 2015].