Sandhill Cranes

(*Grus canadensis*)

Species Specifics

Cranes are large, long-legged and long-necked birds of the order *Gruiformes*, and family *Gruidae*.

There are 15 species of cranes in the world, but only two are found in North America—the Sandhill crane and the whooping crane. The whooping crane is essentially all white and is slightly larger than the Sandhill crane.

There are six subspecies of Sandhill cranes—greater, lesser, Florida, Cuban, Mississippi and Canadian. However, there is some debate on the Canadian Sandhill crane being a distinct subspecies, as it overlaps with lessers in some areas and greaters in other areas.

Three subspecies of Sandhill cranes occur in Washington—greater, lesser and Canadian.

Of the 15 crane species, 10 are listed by the International Union for Conservation of Nature (IUCN) as vulnerable, endangered or critically endangered. Six of the 15 species are also considered "endangered" under the Endangered Species Act, although only the whooping crane is found within the United States. Two of the Sandhill crane subspecies are also considered federally endangered—the Cuban, found only in Cuba, and the Mississippi, found in Mississippi. All three subspecies in Washington—greater, lesser and Canadian—are listed as endangered at the state level by the Washington Department of Fish and Wildlife.

Greater Sandhill cranes are the only subspecies that nest in Washington, in the Glenwood Valley near Mt. Adams. Conboy Lake National Wildlife Refuge provides habitat for the majority of these birds. Breeding greater Sandhill Cranes disappeared from Washington in the 1940's but reappeared in 1972 when two cranes were seen on Conboy National Wildlife Refuge. Nesting on the refuge was confirmed in 1979 when one pair produced eggs; however, no fledglings were produced. Since then the number of breeding pairs has increased to 20-25 on the refuge, with about 4-5 additional breeding pairs on other lands in the Glenwood Valley.

Sandhill Cranes are the most abundant of the world's cranes, with a total population of around 650,000. Lesser Sandhill cranes—our birds—are also the most numerous, with a population of approximately 450-500,000. Most of those can be found in the Mid-Continent population, which winters in New Mexico, Texas and northern Mexico. Those are the cranes that famously congregate by the thousands along the Platte River in Nebraska as they head north to breeding grounds in Canada, Alaska and eastern Siberia.

Around 35,000 lesser Sandhill cranes follow the Pacific Flyway, coming through eastern Washington during their spring and fall migrations, stopping over on the Columbia National Wildlife Refuge and the Hanford Reach National Monument. These cranes winter in the southern portion of California's Central Valley and pass through on their way to nesting sites in the Matanuska River Valley and Bristol Bay areas of south-central Alaska.

Description

The different sub-species of Sandhill crane vary greatly in size and weight. Lesser Sandhill cranes are the smallest, weighing on average about 6-7 pounds and standing 3-3.5 feet tall. At the other end, greater Sandhill cranes are the largest sub-species and average 4.5-5 feet tall and 10-14 pounds. Canadian Sandhills are intermediate in size.

Body plumage is characterized by varying shades of gray. The forehead and crown are covered with reddish skin. The face, chin, upper throat, and nape are white to pale gray. Adults have a white cheek patch. Legs and toes are black. In general, males and females are virtually indistinguishable, but within a breeding pair, males tend to be larger than females. Juvenile plumage changes from cinnamon brown to gray as the bird matures during the first year. In many areas, Sandhill cranes preen iron-rich mud into their feathers, creating a deep rusty brown hue which lasts through spring and summer.

Sandhill cranes are primarily birds of open fresh water wetlands, but the different subspecies utilize habitats that range from bogs, sedge meadows, and fens to open grasslands, pine savannas, and cultivated lands. Sandhill cranes occur at their highest breeding density in habitats that contain open sedge meadows in wetlands that are adjacent to short vegetation in uplands.

General Information

A crane fossil from the Miocene, thought to be about ten million years old, was found in Nebraska and is structurally identical to the modern sandhill crane.

Sandhill cranes are named for the Sand Hills region of Nebraska.

Sandhill cranes are long-lived, up to 20+ years.

Sandhill cranes have wingspans of approximately 6 feet.

All cranes are omnivorous. Sandhill cranes feed on a wide variety of plant tubers, grains, small animals and invertebrates, such as insects or worms.

Security at roost sites is a key element of why birds use certain roosts. They prefer open water, and sandbars where they have good visibility. Day roosts mainly require an open view.

Although most predators avoid adult Sandhill cranes, when threatened a crane vaults into the air toward the potential predator, throwing its feet forward in a front kick.

Migration & Flight

Sandhill cranes can fly from 15 to 50 miles per hour, depending on wind speed and direction. They circle skyward on rising columns of warm air—called thermals—to help them gain altitudes of up to 12,000 feet! Generally, however, they migrate at altitudes of less than 5,000 feet.

Unlike the similar-looking but unrelated herons, cranes fly with necks outstretched, not pulled back.

When migrating, Sandhill cranes may average 150 to over 400 miles a day, usually during daylight hours when helpful air currents are strongest.

The Cuban, Mississippi and Florida subspecies of Sandhill cranes are non-migratory.

Breeding

Sandhill cranes begin breeding between two and seven years of age. They are perennially monogamous, that is they "mate for life." However, if the mate dies, the survivor will choose a new mate, but mating success often depends on how many breeding seasons a pair has been together. One reason is that pairs need to practice being parents together to successfully raise young. They exhibit extended bi-parental care of young, with families staying together for up to a year.

Cranes "dance" to attract mates. Although it is commonly associated with courtship, dancing can occur at any age and season. Dancing is generally believed to be a normal part of motor development for cranes and thwarts aggression, relieves tension and strengthens the pair bond.

Mated pairs of cranes engage in unison calling, which is a complex and extended series of coordinated calls. While calling, cranes stand in an upright posture, usually with their heads thrown back and beaks skyward during the display.

A typical crane nest is a low mound of vegetation, usually located in a wetland. Females usually lay two eggs, and incubation by both sexes lasts 29-32 days. The male takes the primary role in defending the nest against possible danger. Both parents incubate and feed the chicks throughout the pre-fledging stage, which is typically 67-75 days.

Juvenile cranes are called colts.

The single, most important factor regulating crane populations is habitat availability. Nesting effort and success, as well as survival of young, correlate directly with the amount and quality of nesting habitat.