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Birds of the Great Plains: Family Gruidae (Cranes)

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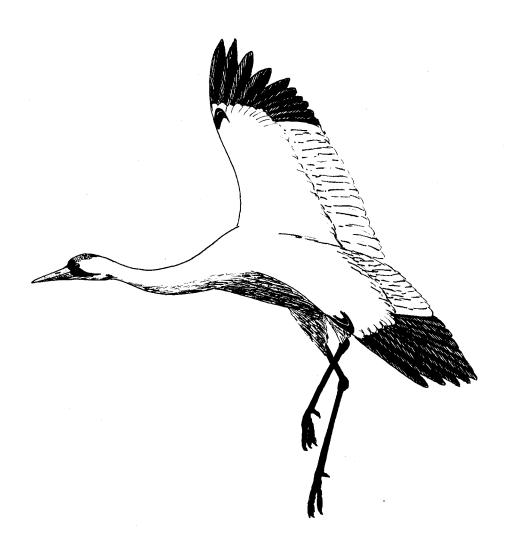
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FAMILY GRUIDAE (CRANES)



Whooping Crane

Whooping Crane Grus americana

Breeding Status: Extirpated. Previously bred locally in North Dakota, Minnesota, and northern Iowa. The most recent known nesting was during 1915 in North Dakota and before 1900 in Minnesota and Iowa.

Breeding Habitat: Breeding on the Great Plains occurred in large prairie marshes and their adjoining wet meadows.

Nest Location: Nests are on piles of rushes, cattails, and similar vegetation in shallow water or on damp ground near water. They are often in water 12 to 18 inches deep and elevated about a foot above the water. There sometimes is a moat of open water immediately around the nest, probably because the birds use the emergent vegetation in the vicinity to build the nest.

Clutch Size and Incubation Period: Normally 2 eggs, buffy to olive with spots and blotches of brown tones. The incubation period is about 30 days. Single-brooded.

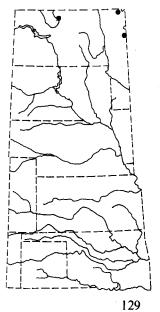
Time of Breeding: The relatively few egg dates available for this region are from May 4 (Iowa) to June 3 (North Dakota).

Breeding Biology: At present wild whooping cranes nest only in Wood Buffalo National Park, Northwest Territories, Canada. There, crane pairs defend the same territories year after year and occupy nonoverlapping home ranges of about a square mile. Nests are thus well isolated from one another, and both sexes defend the nest fiercely. Incubation is likewise shared, with several changeovers per day. As in sandhill cranes, incubation begins with the first egg, and thus hatching is staggered over a period of about 24 hours. Also like sandhill cranes, the young birds often fight and thus the younger, weaker bird sometimes is killed. The fledging period is apparently similar to that of the greater sandhill crane, about 2 months.

Suggested Reading: Allen 1952.

Greater Sandhill Crane Grus canadensis tabida

Breeding Status: Virtually extirpated. The greater sandhill crane formerly bred rather widely in North Dakota and locally in South Dakota, as well as in Iowa and western Minnesota. The only definite North Dakota breeding record since 1916 was obtained in 1973 in McHenry County. Recent breeding evidence for northwestern Minnesota is from Roseau County (1954 and 1966) and Clearwater County (1972).



Breeding Habitat: Cranes require extensive areas of minimal human disturbance for their nesting. They have large territories that vary with population density but often exceed 100 acres, usually consisting of wet meadows that provide water, sites for feeding, nesting, and roosting, and brood-rearing areas. The extensive prairie marshes that once offered these features are now mostly drained, and human disturbance at the remaining ones is too severe for cranes.

Nest Location: Studies in Idaho indicate that nests are usually either in shallow water (averaging about 8 inches deep) or on the shoreline fairly near water (averaging about 15 feet away). In decreasing order of usage, they nest in wet meadow-marsh edge areas near shore, islands, dry upland meadows, marsh area far from shore, and artificial dikes. Old nest sites are rarely used in following years, but the nest is often placed near the old site. Nests on dry land are small and simply constructed, whereas those on water are more bulky, constructed of any vegetation easily available in the vicinity.

Clutch Size and Incubation Period: Normally 2 eggs (rarely 1 or 3). Eggs are olive with darker olive or brown spotting. The incubation period is 30 days, starting with the first egg. Single-brooded, with renesting frequent.

Time of Breeding: Egg dates in North Dakota are from May 1 to July 9, and dependent young have been seen from June 6 to July. Iowa egg dates are from May 2 to May 27, and in Minnesota eggs have been found from April 29 to May 21.

Breeding Biology: Cranes are monogamous, probably pairing for life after reaching reproductive maturity at about four years of age. Upon returning to their breeding areas, pairs establish territories as early as 2-4 weeks before nest-building gets under way. Nest-building is done by both sexes and may take from a day to a week or more. Eggs are laid at 2-day intervals, and both sexes participate in incubation, with the female apparently always doing the nighttime incubation. The eggs typically hatch 24 hours apart, and the chicks begin to feed immediately, with the first-hatched often taken away from the nest by one adult while the other remains to hatch the second chick. Perhaps because the young "colts" are very aggressive toward each other, they are often brooded separately. Fledging occurs at 67-75 days of age, and the family soon migrates as a unit.

Suggested Reading: Drewien 1973; Littlefield and Ryder 1968.