#### University of Nebraska - Lincoln

### DigitalCommons@University of Nebraska - Lincoln

Birds of the Great Plains (Revised Edition, 2009) by Paul Johnsgard

Papers in the Biological Sciences

2009

### Birds of the Great Plains: Family Phalacrocoracidae (Cormorants)

Paul A. Johnsgard University of Nebraska-Lincoln, pajohnsgard@gmail.com

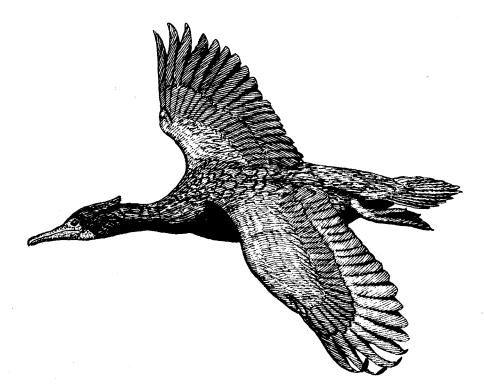
Follow this and additional works at: https://digitalcommons.unl.edu/bioscibirdsgreatplains

Part of the Ornithology Commons

Johnsgard, Paul A., "Birds of the Great Plains: Family Phalacrocoracidae (Cormorants)" (2009). *Birds of the Great Plains (Revised Edition, 2009) by Paul Johnsgard*. 11. https://digitalcommons.unl.edu/bioscibirdsgreatplains/11

This Book Chapter is brought to you for free and open access by the Papers in the Biological Sciences at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Birds of the Great Plains (Revised Edition, 2009) by Paul Johnsgard by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

## FAMILY PHALACRO-CORACIDAE (CORMORANTS)



#### Double-crested Cormorant

Published in Birds of the Great Plains: Breeding Species and Their Distribution, New Expanded Edition, by Paul A. Johnsgard (UNL-Lincoln Libraries, 2009). Copyright © 1979, 2009 Paul A. Johnsgard.

# Double-crested Cormorant *Phalacrocorax auritus*

**Breeding Status:** Breeds in colonies scattered throughout much of the Dakotas, western Minnesota, and the western half of Nebraska. In northeastern Colorado, a colony at Riverside Reservoir, Weld County, is just outside the limits of the region covered by this book. In Kansas, this species has bred (1951) at Cheyenne Bottoms, Barton County, and since 1959 has nested at least periodically at Kirwin N.W.R., Phillips County. There is also a nesting record for Wilbarger County, Texas. In Oklahoma, nest records have been established for Great Salt Plains (1945-50) and Sequoyah National Wildlife Refuge (1972-74).

**Breeding Habitat:** This species nests on rocky islands or cliffs adjoining water, or in trees in or near water. A supply of fish must be present within 5 to 10 miles of the nesting site. When trees are used, they may be either deciduous or coniferous, but they eventually die from the accumulation of excrement.

Nest Location: In North Dakota, nests in the Missouri River area are situated in the tops of dead trees, primarily cottonwoods, but colonies on islands of natural lakes are usually on the ground. One colony was also reported in willows that were in water  $3\frac{1}{2}$ feet deep. Nests on solid substrates usually have a foundation of sticks, herbaceous vegetation, and rubbish, with finer materials added for lining. The male brings such material to the female, who incorporates it into the nest, and additional materials are added through the season. Garbage, including excreta and the remains of dead animals, also accumulates in the nest.

Clutch Size and Incubation Period: Normally from 4 to 7 eggs (51 North Dakota nests averaged 4.6), but up to 9 have been reported. Eggs are pale bluish with a chalky surface. Incubation period is 25-29 days. One brood per season.

**Time of Breeding:** Extreme egg dates for North Dakota are May 13 to July 18, and extreme dates of dependent young are May 31 to July 25.

**Breeding Biology:** Cormorants are at least seasonally monogamous, usually breeding initially when 3 years old. Courtship occurs on water and includes much chasing and diving. Males choose the territory, which includes the nest and adjacent perching spot. Copulation occurs on the nest, mainly during the nestbuilding period. Both sexes assist in incubation, which begins before the clutch is complete; thus hatching is staggered over several days. The young leave the nest by about 6 weeks but continue to be fed by their parents until 9 weeks of age, when family bonds disintegrate.

Suggested Reading: Palmer 1962; Mitchell 1977.

