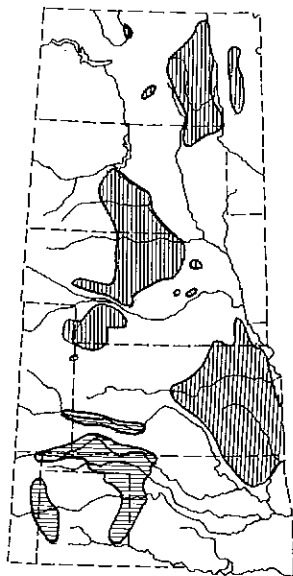


their mother until they are about 4 months old, when the juveniles begin to disperse.

**Suggested Reading:** Johnsgard 1973; Bump et al., 1947.

Pinnated Grouse (Greater and Lesser Prairie Chickens) *Tympanuchus cupido pinnatus* and *T. c. pallidocinctus*



**Breeding Status:** This grassland species once bred throughout the region, but the greater prairie chicken is now localized and restricted to west-central and northwestern Minnesota (Clay, Norman, Wilken, Polk, and Mahnommen counties), eastern North Dakota (mainly Stutsman, Grand Forks, and Barnes counties), south-central South Dakota (mainly Lyman, Tripp, and Gregory counties), the eastern Sandhills area of Nebraska, eastern Kansas, and adjacent northeastern Oklahoma. The lesser prairie chicken (considered by the A.O.U. to be a separate species) occurs in sandy areas of southwestern Kansas, western Oklahoma, southeastern Colorado, the Texas panhandle, and northeastern New Mexico.

**Breeding Habitat:** Greater prairie chickens are associated with native grasslands and with combinations of native grasslands and grain croplands, where the proportion of croplands is fairly low. The lesser prairie chicken differs somewhat in that it needs brushy vegetation such as sagebrush, shinnery oaks, and wild plums for summer shade, winter protection, and supplemental foods.

**Nest Location:** Greater prairie chicken nests are typically in grassy, open habitats such as ungrazed meadows or hayfields, usually in fairly dry situations, but sometimes are in brushy vegetation and occasionally in open woods or the edges of woods. Nests of the lesser prairie chicken are usually between clumps of bunchgrass under shrubby vegetation no more than 15 inches tall. The nest is a shallow scrape, usually lined with leaves and grasses.

**Clutch Size and Incubation Period:** From 9 to 14 eggs (7 North Dakota clutches of the greater prairie chicken averaged 11.4, and 7 Oklahoma clutches of the lesser prairie chicken averaged 10.7). The eggs are buffy to olive, usually with small darker spots. The incubation period is 23-26 days. Single-brooded, but with some renesting.

**Time of Breeding:** North Dakota egg dates are from April 28 to July 1, with young seen from May 31 to July 27. Kansas nesting dates are from May 1 to June 10 for the greater prairie chicken. Oklahoma egg dates for the lesser prairie chicken are from May 16 to June 8, with hatching dates from late May to mid-June.

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**Breeding Biology:** Male prairie chickens establish individual territories in early spring on communal "booming" or "gobbling" grounds and perform their distinctive displays every day for several months. Females are attracted to birds holding central territories, the "master cocks," and such birds are able to mate with most females. After fertilization the female lays her clutch, and incubation begins at about the time the last egg is laid. Until they are about a week old the chicks are brooded much of the time; but they are highly precocial and can fly in less than 2 weeks. Families gradually disintegrate when the young are about 6-8 weeks old.

**Suggested Reading:** Johnsgard 1973; Schwartz 1945.

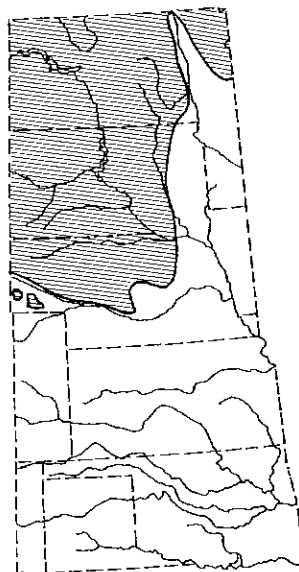
### Sharp-tailed Grouse *Tympanuchus phasianellus*

**Breeding Status:** Resident breeder locally in northwestern Minnesota, most of North Dakota excluding the Red River Valley, the western three-fourths of South Dakota, and the Nebraska Sandhills and adjoining plains areas. A remnant population may occur in northeastern Colorado (Yuma County), but the species is evidently extirpated from Kansas, where it once occurred at least as far east as Ellis County, and also from northwestern Oklahoma. There was also a remnant population in Colfax County, New Mexico, that is now probably extirpated.

**Breeding Habitat:** The Great Plains race of this species is adapted to a grassland habitat where trees are rare or absent. Native grassland vegetation interspersed with from 5 to 30 percent bushy cover is a preferred habitat type in North Dakota and probably elsewhere through this region.

**Nest Location:** In North Dakota, 10 of 22 nests were in unused prairie vegetation, 10 were in unused alfalfa or sweet clover, and grain stubble and hayfields accounted for the others. Vegetation at nest sites is usually at least 12 inches tall. Studies in Michigan indicate a preference there for nesting near shrubby or woody cover and in sites varying from open to 75 percent shaded. The nest is a shallow scrape lined with grasses, leafy materials, and a few feathers.

**Clutch Size and Incubation Period:** From 7 to 18 eggs (29 North Dakota nests averaged 11.9). The eggs are buffy to brownish, usually with a few small darker spots. The incubation period is 23-24 days, starting with the completion of the clutch. Single-brooded, with infrequent efforts at renesting.



# Birds of the Great Plains

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