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Birds of the Great Plains: Family Phasianidae (Quails, Pheasants, and Partridges)

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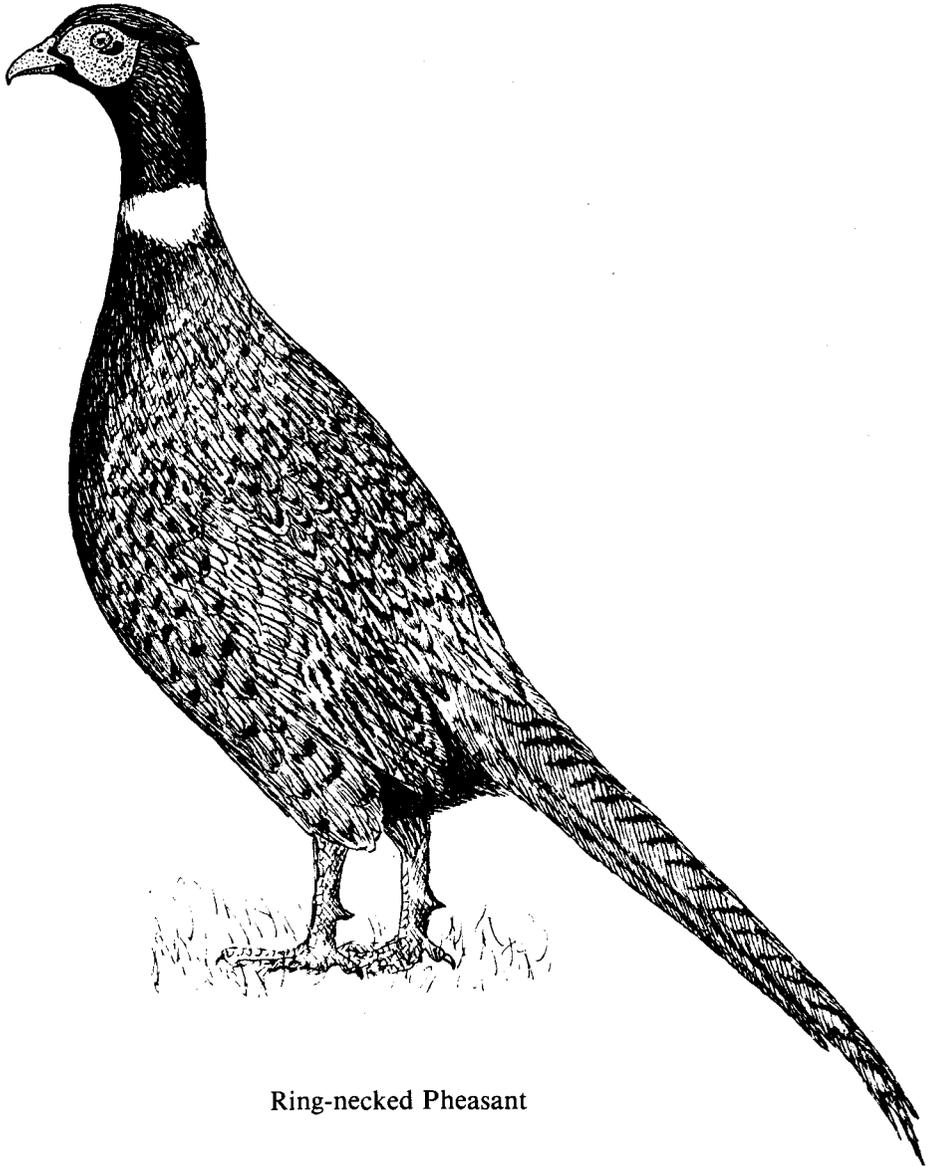
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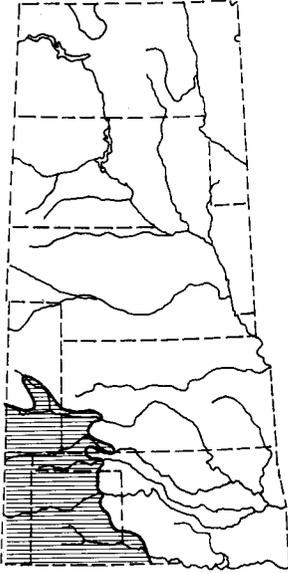
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**FAMILY PHASIANIDAE
(QUAILS, PHEASANTS,
AND PARTRIDGES)**



Ring-necked Pheasant

Scaled Quail *Callipepla squamata*



Breeding Status: Resident in southeastern Colorado, southwestern Kansas, the panhandles of Oklahoma and Texas, and New Mexico. Unsuccessfully introduced in Nebraska.

Breeding Habitat: In our region the scaled quail is generally found near sandy soils and associated sand sagebrush vegetation. Secondly it occupies arid grasslands with cactus or yuccas and to a limited extent uses the piñon pine and juniper habitat type. Shrubby cover for escape and for protection from mid-day heat is an important aspect of this species' needs. Water for drinking is probably not needed if succulents are present, but populations tend to be higher where there is surface water.

Nest Location: Nests are among shrubs or in some other protected and shady location, rarely in open situations among rocks. The nest scrape is lined with dried grasses and few feathers and is often arched over with overhead grasses, which effectively conceal it.

Clutch Size and Incubation Period: From 5 to 22 eggs (39 Oklahoma nests averaged 12.7). Eggs are white and smooth-surfaced. Incubation period is 23–24 days. Probably sometimes double-brooded, and a persistent re-nester.

Time of Breeding: Oklahoma egg records extend from May 8 to September 6, those for New Mexico from April 15 to September 22, and those for Texas from March 11 to September 9. All of these reflect the influence of re-nesting or double-brooding.

Breeding Biology: Scaled quail spend the colder months in large coveys that average about 30 birds but sometimes exceed 100. As the breeding season approaches, males in the coveys begin fighting and mated pairs become intolerant, so that the coveys break up. Unmated males soon take up calling sites and begin uttering loud *whock* calls. The calls attract unmated females, and the calling ceases as soon as a pair bond is formed. Nest-building soon follows, and the male remains nearby as the female begins incubating. Rarely do males assist in incubation, but at least one case is known where the male has taken over the brooding responsibilities for a young brood and thus allowed the female to begin a second clutch. The young feed on a variety of insects and can probably fly within 2 weeks. Family bonds remain intact, and there is a gradual fall merging of broods and pairs to form the rather large coveys characteristic of the species.

Suggested Reading: Schemnitz 1961; Johnsgard 1973.

Ring-necked Pheasant *Phasianus colchicus*

Breeding Status: Introduced. Resident throughout most of the region except for northwestern Minnesota, most of Oklahoma, the Texas panhandle, and New Mexico. Increasingly local toward the south and west and largely limited to irrigated areas or other sites with permanent surface water.

Breeding Habitat: A combination of small grain croplands and adjacent edges, such as weedy ditches, sloughs, wooded areas or shelterbelts, or uncut hayfields provide optimum breeding habitat for this species.

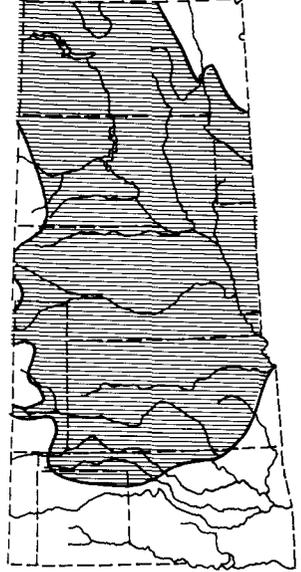
Nest Location: In North Dakota, most nests have been found in roadside ditches, in alfalfa or sweet clover fields, and in heavy grasses, with smaller numbers in cropland, shelterbelts, pastures, and the like. In Nebraska, roadside ditches with an abundance of early-maturing rather than warm-season grasses provide valuable nesting cover. Alfalfa, cool-season grasses, and winter wheat accounted for about 80 percent of all nests found in a study there. The nest is usually well concealed and lined with leaves, grasses, and a few feathers.

Clutch Size and Incubation Period: From 6 to 15 eggs (469 Nebraska nests averaged 9.4). Eggs are uniformly olive to brownish with a slight gloss. The incubation period is 23–25 days, starting with the last egg. Single-brooded, but renesting is frequent.

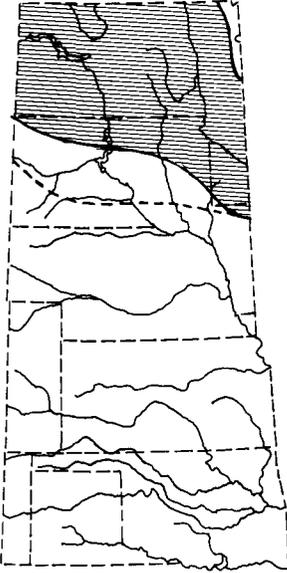
Time of Breeding: North Dakota egg dates are from late April to July 29, with young being reported from May 19 to September 2. In south-central Nebraska, estimated nest-initiation dates range from mid-April to late July, and the average estimated date of hatching is June 11, but the hatching period extends from late April to mid-August.

Breeding Biology: Pheasants spend the winter in small groups wherever there is food and cover, but by early spring the males begin to spread out and establish crowing areas. Although these are not typical territories, the male displays in these ill-defined areas and attracts a variable number of females. This harem is maintained only until the females are fertilized, after which they leave the male and establish a nest. The male plays no further role in reproduction, and the female must both incubate and defend the nest. Nesting losses during incubation are often substantial because of predation and hay-cutting, but renesting efforts help compensate for these high losses. The chicks grow rapidly, and when only a week old they can fly a few feet. The female typically remains with her offspring for 6–8 weeks, or about the time that young males begin to acquire their adult plumage.

Suggested Reading: Baxter and Wolfe 1973; Baskett 1947.



Gray Partridge *Perdix perdix*



Breeding Status: Introduced resident over nearly all of North Dakota, western Minnesota, and the northern third of South Dakota, extending southward to extreme northern Iowa. Previously extended to central Iowa and northern Nebraska (Holt and Knox counties) but now extirpated from the latter state.

Breeding Habitat: In the northern Great Plains, gray partridges are associated with grainfields and adjoining edge habitats such as weedy borders, shelterbelts, and abandoned farmsteads. Surface water may not be essential if enough succulent vegetation is available, but the birds need a supply of grit, and probably also a dusting area.

Nest Location: Hayfields and grainfields accounted for more than half the nest locations in three studies, and alfalfa appears to be a particularly favored cover plant. In a North Dakota study, nearly all of 23 nests were in sweet clover, along roadsides, or in heavy grasses. In hayfields the nests are usually close to the edge of the field and rarely more than 100 feet from the edge. The nests are shallow scrapes lined with dead leaves and grass.

Clutch Size and Incubation Period: From 6 to 20 eggs (470 Wisconsin nests averaged 16.4). Eggs are olive-colored, without spotting. The incubation period is 23-24 days, starting with the last egg laid. Single-brooded, but renesting is frequent.

Time of Breeding: The nesting period in North Dakota is from mid-May to mid-August, with a hatching peak in late June and early July. In the nine-year period from 1955 to 1963, 70 percent of more than 8,000 birds analyzed had hatched between June 16 and July 20, with about 1 percent hatching before June 8 and fewer than 1 percent after August 25.

Breeding Biology: Gray partridges remain in winter coveys in North Dakota until about March, when aggression among the males and competition for mates cause social disruption. Mates of the past year frequently pair again, but many females mating for the first time change their mates several times before a pair bond is firmly established and the pair leave the covey for nesting. Unmated males establish crowing posts from which they regularly call, but there is no territoriality as defense of a specific area against conspecifics. The female builds the nest, with the male standing guard, and lays eggs at about one per day. Incubation is by the female alone, but the male may at times sit beside her, especially at the time of hatching. The precocial young fledge when about 2 weeks old, but family bonds remain intact and form the basis for fall coveys.

Suggested Reading: McCabe and Hawkins 1946; Johnsgard 1973.