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Birds of the Great Plains: Family Sylviidae (Gnatcatchers and Kinglets)

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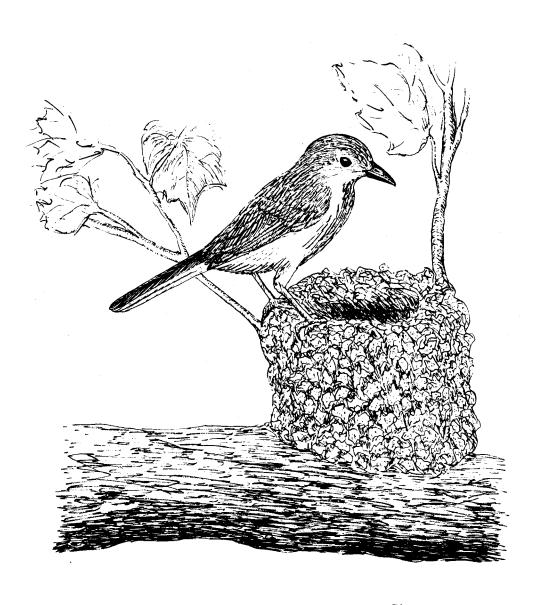
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FAMILY SYLVIIDAE (GNAT-CATCHERS AND KINGLETS)



Blue-gray Gnatcatcher Polioptila caerulea

Breeding Status: Breeds in the Missouri Valley of eastern Nebraska and western Iowa southward through northwestern Missouri, eastern Kansas (west generally to Riley and Cowley counties, and locally to Wallace, Finney, and Grant counties), most of Oklahoma (one 1936 breeding record in Cimarron County is the only one for the panhandle), and the Texas panhandle (Randall and Armstrong counties). It has been reported in summer from Quay County, New Mexico, but there are no breeding records yet. There is a single breeding record (1955) for Itasca State Park, in Minnesota (Loon 49:93).

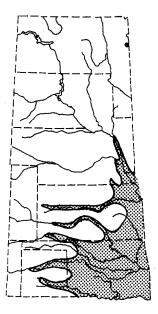
Breeding Habitat: Mixed and deciduous (especially oak) forests and pine woodlands are used in eastern areas, and deciduous brush, piñon pines, and oak-juniper woodlands are used at the western edge of its range.

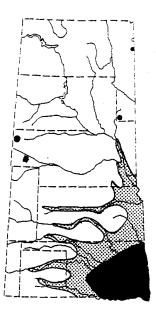
Nest Location: Nests are 5-70 feet above the ground, but usually under 25 feet, and are often on dead horizontal branches or forks of deciduous trees. The small nest is beautifully constructed of plant fibers and down, oak catkins, and such, held together with spider webs and insect silk. It is lined with soft materials, and the outside is covered with lichens and plant down.

Clutch Size and Incubation Period: From 4 to 5 eggs, white to bluish with small reddish brown spots. The incubation period is 13-15 days. Often double-brooded.

Time of Breeding: Egg dates in Kansas are from April 20 to June 20, with a peak of egg-laying about May 10. In Oklahoma, nest-building has been seen as early as April 4 and nestlings have been seen as late as June 8. Texas egg dates are from April 4 to July 3.

Breeding Biology: Shortly after they arrive on their breeding grounds, male gnatcatchers initiate territories; the time depends on the abundance of foliage-dwelling arthopods in the locality. All the breeding activities occur within the territory, which is defended by the male and sometimes also by the female. Pair bonds may be established almost immediately after territoriality begins or may occur later. When a female appears on the territory of an unmated male he accompanies her to various nest sites, frequently perching in an upright posture and singing an elaborate but whispered song sequence. Both members of the pair build the nest, and they frequently obtain materials by dismantling old nests. When only new materials are used, they need about 2 weeks to complete a nest, but when materials are already available they may finish in 3-6 days. Both sexes incubate about equally, and both sexes brood the young, which remain in the nest for 12-13 days. They are at least occasionally fed by their parents for as

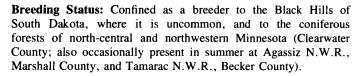




long as 19 days after leaving the nest. In one California study, 3 of 12 pairs raised one brood successfully, and 4 managed to raise two broods. The length of the breeding season there suggests that three broods may sometimes be raised in favorable years.

Suggested Reading: Root 1969; Fehon 1955.

Golden-crowned Kinglet Regulus satrapa



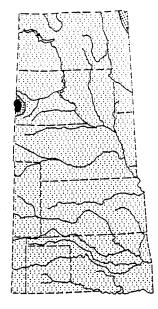
Breeding Habitat: In the Black Hills the species is associated with spruce and occasionally pine forests, and it generally occurs near conifers throughout its range.

Nest Location: Nests are 6-60 feet above the ground in conifers, usually spruces. The semihanging nests are placed close to the trunks of large trees, attached either to twigs or to a horizontal branch. The nest is a nearly spherical mass of mosses and lichens, with a deep cup lined with rootlets, feathers, or strips of bark.

Clutch Size and Incubation Period: From 5 to 10 eggs, often 8-9, white to cream-colored with variable brown spotting. The incubation period is unreported but presumably is 12-16 days. Probably double-brooded.

Time of Breeding: In the Black Hills these birds probably breed in June and July; recently fledged young have been seen as early as July 8. In Minnesota, nest-building has been reported in May, and nestlings have been seen as early as June 18.

Breeding Biology: At least at the edges of their range, kinglets seem to be attracted to closed stands of conifers such as natural or planted groves of spruces that are spaced closely enough to produce a shaded undercover, providing a cool, moist environment for foraging. Most nests seem to be placed rather high in the tree, and they are constructed over a period of about a month, during which the female does all the gathering of materials and actual construction, while the male accompanies her. In one study where the nests of two pairs were destroyed after their clutches had been completed, each pair built three nests and laid a total of 26 eggs. Neither the incubation nor the nestling period has been reported for this species, but in a closely related European species, the goldcrest, the incubation period is 12-16 days



and is performed by the female alone. Thereafter, both parents feed the young in the nest for another 15-17 days and are tended by the parents for another 2 weeks after fledging. At least in that species, two broods are regular.

Suggested Reading: Bent 1949.

Ruby-crowned Kinglet

Regulus calendula

Breeding Status: Known to breed in our region only in the Black Hills, where it is a rare nester at higher elevations. However, it has been observed in summer at Itasca State Park and eastern Marshall County, Minnesota and probably also nests in that general area.

Breeding Habitat: The species is associated with spruce forests in the Black Hills and is generally limited to cool coniferous forests.

Nest Location: Nests are 2-100 (usually 6-30) feet above the ground in conifers, usually spruces, and are attached to hanging twigs below larger horizontal branches. The nest is built in thick foliage and is a deep, hanging cup of mosses, lichens, and other plant materials, lined with fur or feathers.

Clutch Size and Incubation Period: From 5 to 11 eggs, generally 7-9. The eggs are white with tiny brown spots. The incubation period has been estimated to be 12-15 days. Probably single-brooded.

Time of Breeding: Although there are no specific nesting records, the probable breeding season in the Black Hills is during June and July. Egg records for Colorado are as early as June 9, and young have been seen as early as June 21.

Breeding Biology: Apparently no modern studies have been done on either the golden-crowned or ruby-crowned kinglet. It is known that exhibition of their brilliant crown patches is an important part of aggressive and courtship display behavior. It is believed that only the female incubates, and that the young remain in the nest for about 12 days. Observations in Colorado suggest that the female broods the young and passes on to the young food that is brought in by the male.

Suggested Reading: Bailey and Niedrach 1965; Bent 1949.

