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Birds of the Great Plains: Family Trochilidae (Hummingbirds)

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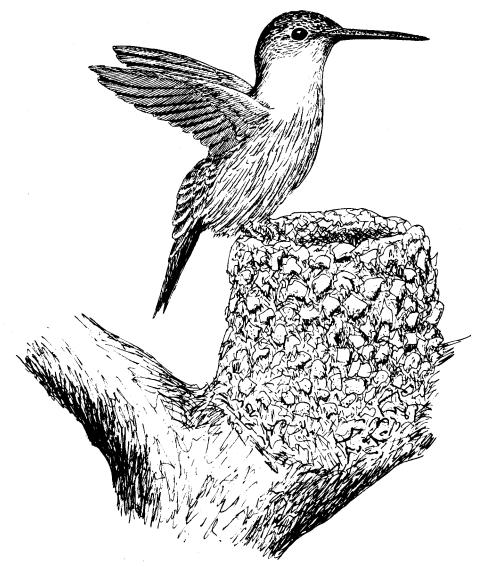
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FAMILY TROCHILIDAE (HUMMINGBIRDS)



Ruby-throated Hummingbird

Ruby-throated Hummingbird *Archilochus colubris*

Breeding Status: Breeds generally throughout the eastern half of the region, west to central North Dakota (Turtle Mountains), eastern South Dakota, eastern Nebraska, central Kansas, west-central Oklahoma (probably to Woods County), and northeastern Texas (Cooke County).

Breeding Habitat: A variety of wooded habitats are used, from rather dense to open coniferous and hardwood woodlands and manmade environments (orchards, shade trees). Herbs or shrubs that provide tubular nectar-bearing flowers (honeysuckle, lantana, gilia, trumpet vine, etc.) are an important part of the habitat.

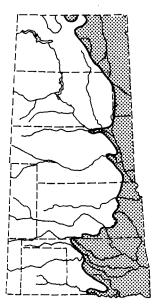
Nest Location: Nests are 6-50 feet above the ground, on fairly level or downward-slanting twigs or branches that are protected from above by larger branches or a leafy canopy. The nest is frequently near water, probably because favored flowers often grow there, and is more often in hardwood trees than in conifers.

Clutch Size and Incubation Period: There are 2 eggs, white and nonglossy. The incubation period is about 16 days. Reportedly but not definitely double-brooded in some areas and definitely known to renest after loss of a clutch.

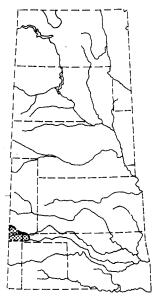
Time of Breeding: A few nest or egg records for North Dakota are for late June and early July. Kansas breeding records are from May 21 to July 10, with a probable peak of laying during the last third of May. Oklahoma records of eggs or apparently incubating females are from May 16 to August 8, and nestlings have been seen as late as August 25.

Breeding Biology: Hummingbirds return to their Great Plains breeding grounds in April to late May, and territorial males advertise by flying back and forth along an arc of a wide circle, frequently passing within a few inches of a perched female at the lowest part of the arc. A male may spend as much as 2 months before attracting and mating with a female, and copulation occurs on the ground. It is apparently preceded by a period of aerial display by both birds, which hover in the air facing each other and ascend and descend vertically. The female spends several days constructing the nest, particularly in attaching lichens to the outside and later adding plant down for lining. Lining is added during incubation and even after the young are hatched. By the time the young are 10 days old they are nearly as large as their mother and are fed a combination of nectar and insects by regurgitation. The young fledged when 19-20 days old in one observed nest, but fledging records range from 14 to 28 days, suggesting considerable variability in this regard.

Suggested Reading: Bent 1940; Pickens 1936.



Broad-tailed Hummingbird Selasphorus platycercus



Breeding Status: Accidental or very rare breeder in the Great Plains, with early nesting reports for Cimarron County, Oklahoma, now considered doubtful (Sutton 1974). The species has been seen as far east as Baca County, Colorado, and in Union County, New Mexico, but has been proved to nest only in Las Animas County, Colorado. The black-chinned hummingbird (*Archilochus alexandri*) also occurs in summer east to Union County, New Mexico, and a possible nest of this species was found in Cimarron County, Oklahoma, in 1971. It might also nest in Baca County, Colorado. Hummingbird nests of uncertain species have also been reported from Woods, Caddo, and Beckham counties in Oklahoma (Sutton 1974).

Breeding Habitat: The species is generally associated with ponderosa pine forests in Colorado but extends from the plains all the way to the timberline.

Nest Location: Nests are often in shrubs near moist canyon walls but also are placed in aspens, Douglas firs, or other conifers. Nests are usually 4-15 feet above the ground and are typically on small horizontal branches. They are covered with spider webs, to which is attached vegetation that matches the surrounding nest support.

Clutch Size and Incubation Period: There are 2 white eggs, which are incubated 16-17 days. Probably single-brooded.

Time of Breeding: There is a single egg record for June 20 in Oklahoma. Colorado egg records are from June 20 to July 24, and nestlings have been seen from July 8 to July 24.

Breeding Biology: In central Colorado these hummingbirds arrive in early May, and the males soon become highly territorial, chasing other males from the vicinity. Their display consists of hovering in front of a female, orienting the brilliant red gorget toward her, then quickly climbing 30-40 feet and making a vertical dive downward, swooping directly past the female. The female spends several days gathering cottonwood or willow down and spider webs to construct her nest, which is usually on a horizontal tree branch with another branch or crook directly overhead. Of 10 Colorado nests studied, 5 were in aspens, 4 in spruces, and 1 in a subalpine fir. They were from 3 to more than 30 feet above the ground, and the nest core was coated with moss, lichens, and fragments of aspen bark. All incubation is by the female; the promiscuous males play no role in parental care. The young are initially fed on regurgitated food, but increasingly they are provided with tiny insects. The female feeds them by thrusting her bill into their throats and regurgitating with rapid pumping movements of the head. The young soon nearly outgrow their

nest, which is well trampled down by the end of the 18-day nestling period. Females have been known to consume almost twice their own weight in sugar syrup during the day, which provides some measure of the metabolic rate of these tiny birds.

Suggested Reading: Calder 1973; Bailey and Niedrach 1965.

