

MALE-PLUMAGED ANNA'S HUMMINGBIRD FEEDS CHICKS

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With few exceptions, the literature on hummingbirds reports that the male hummingbird courts, copulates, and moves on, uninvolved in any part of the subsequent nesting process. There are only two published reports of adult male hummingbirds feeding chicks. In 1954, Ernst Schäfer reported that in Venezuela he had observed and photographed a male Sparkling Violet-ear (*Colibri coruscans*) feeding a single nestling (Skutch 1973). Schuchmann (1999:506) dismissed this report as unlikely on the grounds that it "might easily have been misinterpretation" because the Sparkling Violet-ear is monomorphic. In 1970, in her yard in Napa, California, Clyde (1972) observed a male-plumaged Anna's Hummingbird (*Calypte anna*) feed a solitary chick left in a nest after the first chick had fledged and the female tending the nest had disappeared. This observation is often recounted in the literature without comment (Russell 1996:16, Johnsgard 1997:55) or is dismissed as "highly doubtful, since male-like plumage has been reported in a variety of female hummingbirds" (Tyrrell 1985:105). Stiles and Martinez (1992) expressed skepticism about the reports by Schäfer and Clyde because of the lack of unequivocal feeding.

In May 2007 an unmistakably male-plumaged Anna's Hummingbird fed chicks in a nest in a residential yard in Eugene, Oregon (44° 2' N, 123° 1' W). The nest was in an Oregon white oak (*Quercus garryana*) in a mixed wooded area of predominantly Oregon white oak, Douglas-fir (*Pseudotsuga menziesii*), and Oregon ash (*Fraxinus latifolia*). The oak was roughly 11 meters in height. The nest was on a limb about 2 meters from a deck on a house. The limb was about 6 meters from the ground, at the same height as the deck railing. The nest was also at the same height as a feeder about 3 meters from the nest. I observed the nest from the building stage (initiated by 23 May), through incubation (two-egg clutch), to the development of two chicks, hatched by 12 June 2007. On 24 June I observed an adult male-plumaged Anna's Hummingbird visit the nest. I monitored and photographed activity at the nest on 24 June from 11:15 to 12:02 and from 12:45 to 15:25. A male-plumaged Anna's Hummingbird visited the nest repeatedly, sometimes sitting on it (Figure 1), sometimes feeding the chicks (Figure 2). In the course of the same day an adult female Anna's Hummingbird also visited the nest. I was unable to make observations on 25 and 26 June. On 27 and 28 June I observed the two chicks in the nest. By the morning of 29 June only one chick was in the nest and the female was not present in the area; the male-plumaged Anna's Hummingbird, however, remained and fed the lone chick at 8:35. By 12:50 on 29 June that chick had also fledged.

Although Clyde (1972) wrote that there was a remote possibility that the Anna's Hummingbird at her nest was a female in male plumage, the photo-documentation at the nest I describe strongly suggests that the apparent male at my nest was indeed a male. Female Anna's Hummingbirds usually have a rosy patch on the gorget (Williamson 1956, Russell 1996), and some have scattered iridescent rosy pink feathers on the crown (Howell 2003), but there are no reports of an adult female with a complete complement of red crown feathers, as evident in Figures 1 and 2 or on the individual reported by Clyde (1972). In addition to having the head and gorget color typical of an adult male, the apparent male I photographed had throat feathers elongated laterally and posteriorly, according to Russell (1996) characteristic of the male's definitive basic plumage.

At the nest described by Clyde (1972) and at mine the behavior of the apparent male was in many ways similar. At both the male perched repeatedly near the nest;

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Figure 1. Male-plumaged Anna's Hummingbird sitting on nest, Eugene, Oregon, 24 June 2007.

Photo by Elizabeth A. Mohr

Clyde reported sometimes "about 12 inches" from the nest, recurrently over 3 days before the fledging. At the Oregon nest the male perched within 3 meters of the nest repeatedly from 19 to 29 June. Clyde remarked that the female tolerated the male's presence; in my observation the female also did not resist the male's visiting the nest even though she was also present and still attending the nest. In both instances the female disappeared after the first chick fledged and the male then took responsibility for feeding the remaining nestling. The settings of the two nests were also similar, as both yards had a year-round feeder nearby and there was a regular human presence near the nest. Both instances occurred near the end of the breeding season for the Anna's Hummingbird (Russell 1996, Patterson and Scheuring 2003). Photos show that the male-plumaged Anna's Hummingbird at my nest had started wing molt (suggesting he was done with displaying and any more nesting attempts) but was not quite as advanced in primary molt as the female at the nest.

My observation is more definitive than Clyde's because of photo documentation. Taken together, Clyde's observations and mine suggest that the male Anna's Hummingbird can play a role in feeding nestlings and that the female can tolerate his involvement.

In addition to the reports of male hummingbirds feeding nestlings mentioned above, there have been reports of other types of male hummingbirds' involvement with nesting over a range of time, places, and species. Wheelock (1916) reported seeing in California a male Anna's Hummingbird "on guard" near a nest and a Black-chinned Hummingbird (*Archilochus alexandri*) sitting "within two feet of the brooding mother." Bailey (1927) reported seeing a male Rufous (*Selasphorus rufus*) incubate a nest in southeastern Alaska. Welter (1935) reported seeing a male and a female Ruby-throated (*Archilochus colubris*) work together on a nest in Kentucky. In Utah in 1923 Clarence Cottam and his wife observed a male Calliope Hummingbird (*Stellula calliope*) feed an incubating female a number of times by regurgitation (Cottam 1941). Schäfer's male Sparkling Violet-ear in Venezuela, distinguished by its "abnormally light crown" (Skutch 1973:82), took turns sitting on the eggs in the nest. Skutch (1973:82) also reported that Augusto Ruschi "stated that males of the

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Figure 2. Male-plumaged Anna's Hummingbird feeding chicks in nest, Eugene, Oregon, 24 June 2007.

Photo by Elizabeth A. Mohr

hermit genera *Glaucis* and *Phaethornis* usually cooperate with the female in caring for the young." Moore (1947) recounted incidents of male hummingbirds of several species guarding a nest or an incubating female and even building a nest; in Ecuador he reported seeing a male Sparkling Violet-ear guarding and then incubating a nest after the female was collected; the sexes of both birds were confirmed by dissection. In Costa Rica Wolf and Stiles (1970) reported a pair of Fiery-throated Hummingbirds (*Panterpe insignis*) of which the male defended and shared feeding territory with at least one female while she tended a nest. Also in Costa Rica, Stiles and Martinez (1992:369) observed one adult Band-tailed Barbthroat (*Threnetes ruckeri*) feed another that was incubating. Those authors thought both birds might have been female but concluded that "it is also possible that the second adult was a male, in which case we witnessed a very uncommon event." These wide-ranging reports collectively suggest that the role of the male hummingbird in the nesting cycle can be more varied and extensive than generally assumed.

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