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Great Shrike-Tyrant predation on a Green-backed Firecrown.—On 26 July 1990 (11:45 EST) at Reserva Natural Las Chinchillas (north-central Chile, 31°30'S, 71°06'W) I observed a Great Shrike-Tyrant (*Agriornis livida*) capture a Green-backed Firecrown (*Sephanoides sephanoides,* Trochilidae) at a mistletoe patch (*Tristerix aphylus*). After dropping to the ground, the Great Shrike-Tyrant slammed the hummingbird against the ground with sideways jerking motions. It then flew away with the hummingbird's limp body in its bill. Great Shrike-Tyrants are robust birds (about 100 g, Humphrey et al. 1970) with large, powerful, hooked bills. They are solitary and secretive but fairly common in the Mediterranean semiarid thorn-scrub vegetation of north-central Chile (Philippi 1964). Darwin states that he "was assured by the inhabitants that it is a very fierce bird and that it will attack and kill the young of other birds" (in Crashway 1907, p. 70). At Las Chinchillas, Great Shrike-Tyrants prey on lizards and large insects (J. E. Jiménez, unpubl. data). My observation indicates that they are also capable of preying on hummingbirds. Stiles (1978) has suggested that Tiny Hawks (*Accipiter superciliosus*) catch hummingbirds by waiting quietly ("still-hunting") near territorial perches and flower clumps. My observation suggests that "still-hunting" near flower clumps may also be used by Great Shrike-Tyrants to catch hummingbirds.

The rarity of predation observations on North American hummingbirds has prompted Miller and Gass (1985) to conclude that predation is not a significant risk for hummingbirds in temperate habitats and that biologists are justified in ignoring predation as a factor influencing hummingbird feeding behavior (see Lima 1991 for a contrasting view). In tropical habitats, predation by Bat Falcons (*Falco rufigularis,* Beebe 1950) and Tiny Hawks (Stiles 1978) may not justify this assumption. Jiménez and Jaksic (1989) report remains of *S. sephanoides,* the most abundant Chilean hummingbird, in pellets of Austral Pigmy-Owls (*Glaucidium nanum*) at Reserva Natural las Chinchillas. Only further observations will establish if predation by Great Shrike-Tyrants and Austral Pigmy-Owls represents a significant risk to foraging hummingbirds in Chilean semiarid habitats.

Acknowledgments.—J. Jiménez provided housing and a wealth of information on the Natural History of Aucó. P. Feinsinger and J. Simonetti made my visit to Chile possible. M. Kinnard and T. O'Brien commented on the manuscript.

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CARLOS MARTINEZ DEL RIO, *Dept. of Ecology and Evolutionary Biology, Princeton Univ., Princeton, New Jersey 08544-1003.* *Received 30 July 1991, accepted 24 Oct. 1991.*

Wilson Bull., 104(2), 1992, pp. 369–370

Observations of an adult hummingbird provisioning an incubating adult.—Among hummingbirds, only females invest heavily in nest construction and nestling care (Wolf and Stiles 1970). Incubation and feeding of nestlings are almost always performed by a single adult female. Males engage in indirect activities such as territory defense and nest guarding, if they contribute to the nesting effort at all (Moore 1947, Wolf and Stiles 1970, Snow 1973). Although circumstantial evidence exists for males incubating eggs (Moore 1947, Schafer 1954) and feeding young (Schafer 1954, Clyde 1972), in few cases have the presumed males been sexed unequivocally, and in no cases have these anomalies proved to be general phenomena. Wagner (1952) reported cases where more than one female Blue-throated Hummingbird (*Lampornis clemenciae*) shared incubation at a single nest. However, direct food provisioning to an incubating individual previously has not been reported for a hummingbird. This note is the first account of an adult Band-tailed Barbthroat (*Threnetes ruckeri*) provisioning a second, incubating adult on the nest.

Our observations were made in a primary lowland rain forest about 35 km SE of Golfito, Province of Puntarenas, Costa Rica. From 18–20 January 1991 we observed a single Band-tailed Barbthroat nest from a distance of 15 m with 10 × 50 binoculars. The nest, containing two eggs, was hanging beneath, and was therefore sheltered by, a large leaf (*Heliconia* sp.) approximately 2 m above the bank of a brooklet. Two *T. ruckeri* in adult plumage attended the nest. Neither bird showed plumage characteristic of a subadult bird (e.g., buffy feather edges would indicate a recently fledged bird; W. Baltosser, pers. comm.). Both individuals were within 3 m of the nest simultaneously for 2.35 h of the 16 h of observation. In all cases when both individuals were present, one was incubating and the other either perched within 1 m of the nest, hovered near the nest, or flew in the general vicinity of the nest. We were unable to recognize individuals based on plumage. However, we believe the two maintained their respective roles, since during each incubation bout the nonincubating individual repeatedly flew from its perch, hovered directly in front of the incubating bird, and returned to its perch. In 73 out of 219 (34%) of these approaches, bill contact occurred between the birds; the hovering bird inserted its bill into the open gape of the incubating bird, flexed its throat muscles, and exerted its tongue, indicating the transfer of food. At least one approach with feeding occurred during each incubation bout. After most approaches (both with and without provisioning), the nonincubating bird returned to its perch and called.

We were unable to sex these birds unequivocally by observation alone. The incubating individual was likely a female. The nonincubating individual may have been a female that had lost her clutch or brood and had begun cooperating with the nesting female. Alternatively, this bird may have been feeding her own brood, and once those young were lost, continued to feed but at another nest where incubation was still in progress. It is also possible that the second adult was a male, in which case we witnessed a very uncommon event. Although we have no evidence to suggest that this provisioning incident is characteristic of *T. ruckeri*