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**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*

or hermit hummingbirds in general, further intensive studies of the breeding biology of this avian group may yield some interesting surprises.

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**A case of aggregated nest placement and probable polygyny in the Swainson's Warbler.**—Field studies of wood warblers (Parulinae) have shown that their mating systems are more complex and variable than previously suspected (cf Verner and Willson 1969, Ford 1983, Morse 1989). In particular, facultative polygyny may be widespread in wood warblers. In the most thoroughly studied species, Prairie Warbler (*Dendroica discolor*), polygynists are usually monoterritorial but occasionally defend widely spaced territories (Nolan 1978). The distance between simultaneously active nests of females mated to the same male ranged from 50 to 300 m ($N = 36$; $\bar{x} = 124 \pm 59$ m). Female wood warblers mated to monoterritorial polygynists defend exclusive territories. Aggregated nest placement, the tight clustering of nests within a territory, is unknown in wood warblers. Here I report an unusual case of aggregated nest placement and the first probable record of polygyny in the Swainson's Warbler (*Limnothlypis swainsonii*). The breeding biology of this uncommon species remains poorly known, owing to the inhospitable nature of the habitat where it reaches its greatest abundance—wooded floodplains of rivers in southeastern North America. The bulk of what

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FIG. 1. Nests of Swainson's Warbler placed 2.8 m apart in St. Martin Parish, Louisiana: (top) nest exhibiting typical construction (see Meanley 1971); (bottom) atypical nest lacking bulky outer layer of dead leaves. Eggs are pure white.