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The nest and territoriality of a female Tyrian Metaltail.—There are no previous records of nesting of the Tyrian Metaltail (*Metallura tyrianthina*), or any other species in this genus. A female Tyrian Metaltail was discovered building a nest on 19 July 1978, in a small cave at 2400 m on the slopes of Cerro Fonté, Vereda de Ferralarada, Município de Choachi, Cundinamarca, Colombia (4°32′N, 73°51′W). The small cave measured 1.2 m deep by 2.4 m wide by 1.8 m high and the pendent nest was attached to plant rootlets and moss near the back wall at a height of 1.3 m. Because we had to leave the area on 25 July neither a completed nest nor contents were seen. The nest, collected before departure, consisted of a mass of moss with pieces of fern and plant fibre and measured 14 × 7.5 × 7.5 cm; at the top was a small nest chamber partially covered by a domed roof of moss. The nest cup lacked lining material.

A total of 9.5 h on 5 days was spent watching in the territory of the nesting female metaltail. Building occurred between 07:25–09:54 on 3 days, when material, mostly moss, was collected nearby, so close that often the female went in with it every 30 sec, entering through the open mouth of the cave and slipping out at the side through overhanging vegetation. On 21 July, the last day building was observed, all material brought was added to the roof. The female also engaged in frequent nest shaping on this day, entering the nest cup and pressing down with her tail as she faced inwards, with her breast and neck as she faced outwards, pausing to adjust the material of the roof above her.

The feeding territory of this female consisted of a triangle of woodland measuring 20 × 25 × 24 m, 1 side being a rocky boundary with the cave. This rocky face extended 46 m and was covered with a 1–7 m wide strip of shrubby vegetation, ending in a group of young eucalyptus (*Eucalyptus* sp.) trees, 1 of which was in flower. All this wooded and shrubby area was included in the female's territory; it was surrounded by rough pasture with scattered trees.

The main nectar resource in the territory on 17 July, when the female's territorial activities were first noted, consisted of a number of *Palicourea angustifolia* (Rubiaceae) shrubs with a total of 59 flowering spikes, 8–10 blooms per spike. The female defended this resource from other metaltails, including a male, and from a female Mountain Velvetbreast (*Lafresnaya lafresnayi*). The female metaltail also fed within the territory on 2 vines of *Manettia coccocypseloides* (Rubiaceae), flowering eucalyptus, and some shrubs of *Palicourea* cf *anacardifolia* with only a few blooms still in flower.

Within the territory the female metaltail uttered a *chack* call between feeding probes. She occasionally sang in flight and when perched, particularly in the morning between dawn and

08:00. The song, which lasted 2 sec, I transcribed as *whit-ser see see see see see*; at times the last 4 notes were delivered in a crescendo. Male metaltails were not heard singing this song, but 2 other females were heard to sing it, which suggests that it may be characteristic of females.

Large rocks and rocky outcrops, clothed in moss when in woodland, were a feature of the slopes of Cerro Fonté between 2400–2500 m. Many similar nest-sites were therefore available for metaltails, which were among the most abundant hummingbird species in the area. It seems probable that during the breeding season the availability of such rocky nest-sites affects the local distribution of this species.

Nests situated in caves or rocky overhangs occur in 3 other hummingbird genera, the hillstars *Oreotrochilus* (Dorst, Oiseau R.F.O. 32:95–126, 1962), the comets *Sappho* (Contino, Hornero 11:265–270, 1975) and the lancebills *Doryfera* (Snow and Gochfeld, Bull. Br. Ornithol. Club 97:121–125, 1977). The amelioration of temperature extremes at high altitudes enjoyed by *Oreotrochilus* roosting and nesting at these sites is well documented (Carpenter, Univ. Calif. Publ. Zool. 106:1–74, 1976). In addition, nesting success is unusually high, probably because of the protection provided from predators. Night temperatures at Cerro Fonté fell to 5°C under a veranda, and at times there were chilling misty rains, so safety and protection from the elements have probably influenced the evolution of the metaltail's choice of nest-site.

Female territoriality over nest-site and adjacent feeding area is normal in the Andean Hillstar (*Oreotrochilus estella*), for whom nest-sites are scarce and probably limit local breeding populations (Carpenter 1976). Female Anna Hummingbirds (*Calypte anna*) also defend nest-site and nearby nectar resources, but apparently choose the nest-site after a suitable nectar source has been found (Stiles, Univ. Calif. Publ. Zool. 97:1–109, 1971). Further study will probably prove the relatively scarce nest-site to be the more critical factor in the choice of territory by female metaltails.

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Male escorting and protecting females at the nest cavity in Mountain Bluebirds.—The Mountain Bluebird (*Sialia currucoides*) is a monogamous, hole-nesting species with parental care almost evenly divided between males and females (Power, Condor 68:351–371, 1966; Power, The Mountain Bluebird, Ph.D. thesis, Univ. Michigan, 1974). In 9 breeding seasons of observation in Cascade County, Montana, between 1961 and 1977, I found that males generally were present when their mates entered or left their nests during the period from pair formation through the brooding of young chicks. During 1976 and 1977, I counted the number of times the male was present when the female arrived or departed at 17 nests in the nest-building through brooding stages. Closed circuit television was used to observe the interiors of 6 of these nests.

A total of 342 arrivals (N = 176) and departures (N = 166) were observed. On 329 (96%) occasions (168 arrivals, 161 departures), the location and behavior of the male was determined. The male was in view of the female on 265 (81%) occasions, i.e., on 138 (82%) arrivals and 127 (79%) departures. Because males frequently were not near their nests at other times and females usually did not enter or leave their nests in the absence of males, I find it appropriate to refer to the presence of males at these times as "male escorting."