

This hummingbird inhabits elfin forest and forest edge on the páramo, and is only known from recent sightings in Ecuador and from a single mountain in immediately adjacent Piura, Peru. Despite its small range it appears not to be immediately threatened.

DISTRIBUTION The Neblina Metaltail is known from three sites in Ecuador and one in Peru.

Ecuador On two or three occasions in August and September 1990 the species was observed near Angashcola, 2,750 m, Loja province, at 4°21'S 79°45'W (Williams *et al.* 1991). On 14 March 1991 a male was seen at close range at the treeline, c.3,100 m, above Cajanuma, Podocarpus National Park, Loja province, at c.4°06'S 79°09'W (M. Kessler *in litt.* 1991; coordinates read from IGM 1982), and in late 1991 the species was found around the lagunas above Cajanuma valley in the same park (C. Rahbek *in litt.* 1992). A female was taken on the east slope of Cordillera de Quichiragua along the Jimbura–Zumba road in the southernmost part of the country in December 1991 (R. S. Ridgely *per* C. Rahbek *in litt.* 1992).

Peru Eleven specimens (in FMNH and LSUMZ) have been taken on the páramo of Cerro Chinguela, at c.5°07'S 79°23'W, on the ridge east of Huancabamba and Sapalache, in the upper Huancabamba valley, Piura department near the Cajamarca border (Graves 1980, Parker *et al.* 1985; also Hinkelmann 1987), with subsequent records in June 1987 high on the eastern slopes (four birds in one day: M. Pearman *in litt.* 1989) and in August 1989 (see Ecology).

POPULATION No estimates of the total populations have been made, but it was reported to occur at low densities and was given the status “fairly common”, with small numbers of singles seen daily and eight seen during a 4 km walk in its habitat on Cerro Chinguela (Parker *et al.* 1985). This assessment also applies to the population within Podocarpus National Park, where although present in low densities it is nevertheless the most numerous hummingbird in the area above the Cajanuma valley (C. Rahbek *in litt.* 1992).

ECOLOGY The Neblina Metaltail is found at 2,850–3,350 m where it inhabits shrubby growth at the forest–grassland ecotone and patches of shrubs and short trees in the grassland well above the treeline, on windswept, foggy and rainy páramo (Graves 1980, Parker *et al.* 1985). Usually alone, it perches conspicuously atop shrubs, and pursues intruding conspecifics and the occasional Glowing Puffleg *Eriocnemis vestitus* entering its territory (Parker *et al.* 1985). It has been observed feeding by flycatching and from flowers of *Brachyotum* and a *Berberis*-like shrub (Parker *et al.* 1985) and (during a snowstorm) from white flowers of a dwarf ericaceous shrub partly concealed by grass (Graves 1980). Five other species of hummingbird seen during the same snowstorm all foraged in more sheltered ravines (Graves 1980). None of the specimens collected in June/July and on 22 October had enlarged gonads (Graves 1980). However, on 21 August 1989 a nest was found on Cerro Chinguela at about 2,850 m, and consisted of a mossy cup covered with pale lichens (possibly held together with spider webs), about 4 cm deep and 5 cm across, placed c.2 m above ground in a small rock-ledge cavity sheltered from the prevailing wind; the weather was poor and the sitting female was left undisturbed, so presence and number of eggs or chicks were not ascertained (B. M. Whitney *in litt.* 1991).

THREATS None is known, and indeed in Peru the inhospitable climate of the region inhabited by this species offers some protection against intrusion by man. The Cerro Chinguela páramo is, however, grazed by a small number of cattle, and is burned almost annually by local herders, which must have an adverse effect on various species of grasses and shrubs and may in turn affect population size and distribution of this and other páramo bird species; for example, the Coppery Metaltail *Metallura theresiae* appears to be considerably more numerous in pristine, tall-grass and shrub-filled páramos than in those that have been burned and grazed for many years (TAP).

Threatened birds of the Americas

MEASURES TAKEN The species is present in Podocarpus National Park in Ecuador, and no burning or grazing currently occurs in the particular area where it was recently recorded (C. Rahbek *in litt.* 1992).

MEASURES PROPOSED Suggestions are included in Remarks under Bearded Guan *Penelope barbata*.

REMARKS Zimmer (1952) considered Viridian Metaltail *Metallura williami*, Violet-throated Metaltail *M. baroni*, Coppery Metaltail, Fire-throated Metaltail *M. eupogon* and Scaled Metaltail *M. aeneocauda* as allospecies of a single superspecies. Graves (1980) considered *odoniae* as an additional allospecies in this superspecies, but pointed out that *eupogon* and *aeneocauda* might occur sympatrically in the southern Cordillera Vilcabamba, Cusco, Peru. Sympatry of *williami* and *odoniae* in Podocarpus National Park (P. Greenfield and M. Kessler verbally 1991), and of *williami* and *baroni* (at Río Mazan) has now been demonstrated (see account of Violet-throated Metaltail).