This cloud-forest undergrowth species has a poorly known and patchy distribution in the West Andes of Colombia and in north-western Ecuador, with few recent records. However, large tracts of apparently suitable habitat remain in protected areas, the reason for its apparent rarity being essentially unknown.

DISTRIBUTION The Tanager-finch (see Remarks 1) is known from just a few apparently disjunct areas on the West Andes in Antioquia, Valle, Cauca and Nariño departments, Colombia, and also from Imbabura and Pichincha provinces, north-western Ecuador, where localities (coordinates from Paynter and Traylor 1977, 1981) are as follows:

Colombia (*Antioquia*) Hacienda Potreros (c.6°39'N 76°09'W; on the western slope of the West Andes, south-west of Frontino), where a male (in USNM) was taken at 1,980 m in June 1950 (also Carriker 1959); (*Valle*) in the region of Alto Anchicayá (c.3°37'N 76°53'W), where the species has fairly recently been recorded (Orejuela 1983); (*Cauca*) in the vicinity of Cerro Munchique (2°32'N 76°57'W), where the bird is regularly found on the western slope (Hilty and Brown 1986), specific localities including: La Costa (untraced, but c.10 km north of Cerro Munchique), where a female (in ANSP) was taken at 1,830 m in March 1938 (also Meyer de Schauensee 1948-1952), Cocal (2°31'N 77°00'W; north-west of Cerro Munchique), where two specimens were collected at 1,830 m (Chapman 1917a), El Tambo (2°25'N 76°49'W; on the east slope of the West Andes), whence come specimens taken at 1,370 m (Bond and Meyer de Schauensee 1940) and four others (in ANSP) taken from 1,830 to 2,285 m between 1937 and 1940, La Romelia (untraced, but within the Munchique National Park), where this species is seen with relative frequency at 2,200 to 2,600 m (Negret 1991), and El Planchón (untraced, but also within the park), where a male was collected at 2,200 m in November 1990 (Negret 1991); and (*Nariño*) La Planada (1°13'N 77°59'W; 1,250 m), where the bird was recorded by Orejuela (1987);

Ecuador (*Imbabura*) Intag (c.0°24'N 78°36'W), where two specimens (in BMNH) were taken in December 1877; (*Pichincha*) on the road to Nanegal (c.0°07'N 78°46'W), whence comes a male specimen (Chapman 1926); Milpe (0°00' 78°57'W), where a specimen was taken in March 1938 (Krabbe 1991); above Tandayapa (0°01'S 78°46'W), where the species was seen (by T. Læssøe) during July 1987 (Krabbe 1991); Mindo (0°02'S 78°48'W), where the bird was collected at 1,260 m (Goodfellow 1901-1902), with a male (in BMNH) taken at 1,200 m in March 1939; and Castillo (untraced, but near Mindo) (Stresemann 1938).

POPULATION Ridgely and Tudor (1989) suggested that the Tanager-finch is very local and extremely scarce, while Hilty and Brown (1986) considered it infrequently seen (as the species is shy and inconspicuous), but at least fairly common locally (on voice). With most recent records coming from a small area in Cauca department, and with just one recent record from Ecuador, the species indeed appears to have an extremely localized distribution, and is seemingly absent from numerous "suitable" areas (Ridgely and Tudor 1989).

Colombia Recent records, apart from the report at Alto Anchicayá and La Planada, are exclusively from the Cerro Munchique area, and perhaps more specifically from the Munchique National Park where the bird is seen with relative frequency (Negret 1991). The Tanager-finch is most regularly found on the west side of the cerro (Hilty and Brown 1986), where groups of up to six birds are not infrequently seen (e.g. around La Romelia: Negret 1991). However, on the eastern slope of the cerro, the species probably occurs at low densities: although two birds were seen there in March 1987, no more were located during five subsequent days of searching (M. Pearman *in litt.* 1990);

Ecuador This species is presumably rare and local as there are very few specimens from the country, the last being taken in 1939, after which there has apparently been just one sighting, in 1987.

ECOLOGY The Tanager-finch has been recorded between 1,200 and 2,600 m (see Distribution; also Remarks 2), where it inhabits primary humid forest (most often dense, wet, mossy cloud-forest) and occasionally forest borders (Hilty and Brown 1986, Ridgely and Tudor 1989). The area within the

boundaries of the Munchique National Park is covered mostly by humid (c.5,000 mm annual rainfall) cloud-forests dominated by *Billia colombiana*, *Clusia* spp., *Persea* sp., *Hyeronima colombiana*, *Quercus humboldtii* and *Weinmannia pubescens* (Hernández Camacho *et al.* undated).

Single birds, but most often close pairs or (family) groups of 3-6, "rummage sluggishly" on or near the ground (in leaf-litter and on mossy logs), in thick undergrowth (including bamboo), where they peer and peck at foliage, stems and fruit (Hilty and Brown 1986, Fjeldså and Krabbe 1990, M. Pearman *in litt.* 1990, P. Kaestner *in litt.* 1992). The species is apparently most often found independent of mixed-species flocks (Ridgely and Tudor 1989), although near La Romelia (Munchique National Park), the species has been observed with mixed flocks led by Rufous Wren *Cinnycerthia unirufa* (Negret 1991).

A male (in USNM) in breeding condition was collected in Antioquia on 8 June 1950, and a juvenile following two adults was also noted during June, in Cauca (Hilty and Brown 1986). Negret (1991) recorded the occurrence of pairs in Munchique National Park during October and November 1990, although other observations (see above, and Population) suggest that this may be a year-round phenomenon.

THREATS Forest clearance is the main threat to this species and has been intense throughout its Colombian range, although large areas of apparently primary or old secondary forest still exist in Valle (F. R. Lambert *in litt.* 1989), while localities in Cauca (e.g. Munchique National Park) have not been severely affected (LGN), despite the fact that agricultural and hydroelectric projects are causing local degradation of the vegetation within the park (IUCN TFP 1988a). In north-west Ecuador, large areas of forest also remain; however, widespread deforestation has occurred, especially along rivers and railways, and is becoming more of a problem as the human population increases (Moore and van der Giessen 1984, Evans 1988b, IUCN TFP 1988b). The Tanager-finch is apparently absent from numerous "suitable" areas, and the reasons for its rarity remain unknown (Ridgely and Tudor 1989). P. Greenfield (verbally 1991) suggested that a general decrease in rainfall may be the cause of its apparent decline in Ecuador.

MEASURES TAKEN Most records of the Tanager-finch come from the Munchique National Park (44,000 ha), which covers the area to the north and west of Cerro Munchique (Hernández Camacho *et al.* undated). Other records come from the Alto Anchicayá area, which is protected by the CVC and is within the Farallones de Cali National Park (150,000 ha) (CNPPA 1982, Hernández Camacho *et al.* undated); and from La Planada Nature Reserve (3,200 ha), an area of mature forest privately owned and now legally protected as a forest protection zone (Barlow *et al.* 1992). In Ecuador, the Cotacachi–Cayapas Ecological Reserve (204,400 ha) protects suitable areas near where the species was collected last century (see Distribution), as does the Awá Indiginous Forest Reserve (over 100,000 ha), on the border with Colombia (IUCN 1992).

MEASURES PROPOSED The guaranteed integrity of forest within the reserves mentioned above is essential if this and other threatened bird species are to survive (see below); where possible, these reserves should be extended, and other remaining forest blocks conserved. There have been recommendations for the establishment of a Biosphere Reserve (for the Awá Indians) in Colombia, to link up with the reserve in Ecuador (Barlow *et al.* 1992: see above): such a large trans-border reserve should be strongly encouraged.

The true distribution, population density and ecological requirements of this species need clarification: determining each of these, especially its status within the various protected areas, is a priority, after which it may be possible to assess its conservation needs and act upon them. The range of the Tanager-finch overlaps with those of a number of other threatened species, which for Alto Anchicayá and Los Farallones de Cali National Park are given in the equivalent section under Multicoloured Tanager *Chlorochrysa nitidissima*, for Munchique National Park under Colourful Puffleg *Eriocnemis mirabilis*, and for La Planada and surrounding areas under Hoary Puffleg *Haplophaedia lugens*; any conservation initiatives should consider the needs of all the sympatric threatened species.

REMARKS (1) The genus *Oreothraupis* is monotypic, and its taxonomic position has been uncertain since it resembles both tanagers and finches (see Meyer de Schauensee 1966). However, following Storer (1958) there has been a general acceptance of its location among the latter, and indeed its behaviour is seemingly much like that of a brush-finch *Atlapetes* (Ridgely and Tudor 1989). (2) The altitudes given by Bond and Meyer de Schauensee (1940) for specimens collected at Munchique are from 580 to 2,285 m,

significantly lower than any other record of the species; whether this lower figure is correct is unknown. Blake (1959) considered 3,000 m the bird's upper limit.