

This montane forest tanager, formerly common and still moderately so where it occurs, is found chiefly in the West but also to a lesser extent (one record since 1951) in the Central Andes of Colombia, where it is threatened by habitat fragmentation.

DISTRIBUTION The Multicoloured Tanager is restricted to scattered areas in the West Andes, with some records from the Central Andes, Colombia. It has been recorded from six departments, where localities (coordinates, unless otherwise stated, from Paynter and Traylor 1981) are as follows:

Antioquia Jericó (5°47'N 75°47'W; at 1,965 m on the eastern slope of the West Andes), where a male (in BMNH) was collected in 1876 (also Sclater and Salvin 1879); and La Bodega (c.5°42'N 75°07'W; on the western slope of the Central Andes, c.17 km east of Sonsón), where three birds (in USNM) were taken at 1,770 m during June 1951;

Caldas Hacienda Sofía (= La Sofía at 5°38'N 75°04'W; on the eastern slope of the Central Andes, and on the south side of the río Samaná), where a female (in USNM) was taken at 1,140 m during May 1951;

Risaralda Siató (c.5°13'N 76°07'W; at 1,600 m on the western slope of the West Andes, and very close to the following locality) (Hellmayr 1911); Pueblorrico (5°12'N 76°08'W; at 1,560 m on the western slope of the West Andes, 25 km north-west of Cerro Tatamá) (Hellmayr 1911); La Selva (c.4°55'N 76°09'W; on the north-western slope of Cerro Tatamá), where six males and four females (in AMNH, plus two in ICN) were taken between 1,525 and 2,135 m from December 1945 until February 1946 (also Meyer de Schauensee 1948-1952); and at the Ucumarí Regional Park (4°43'N 75°35'W; in the Central Andes, 14 km north-east of Pereira), where the species has been recorded at 1,850 m (L. M. Renjifo verbally 1991, LGN);

Quindío El Roble (4°41'N 75°36'W; on the western slope of the Central Andes, and 5 km north-west of Salento), where two males (in AMNH, BMNH) were taken at 2,195 m in November 1911 (also one male in ICN); and Salento (4°38'N 75°34'W; at 1,895 m on the western slope of the Central Andes), whence come two specimens (Chapman 1917a);

Valle “Lago Calima” (Calima = Darién, which is at 3°56'N 76°31'W; on the western slope of the West Andes), where a female (in DMNH) was taken at 1,300 m in December 1975; Bosque de Yotoco Reserve (3°52'N 76°33'W; on the eastern slope of the West Andes: Orejuela *et al.* 1979), where the bird has been recorded between 1,400 and 1,600 m (Orejuela *et al.* 1979); Zelandia (untraced, but in Dagua municipality at c.3°40'N 76°40'W, and on the western slope of the West Andes), where a female (in UV) was collected at 1,750 m; La Cumbre (3°39'N 76°33'W; at 1,580 m on the Pacific slope at the crest of the West Andes, 21 km north-north-west of Cali), where five birds (in CM) were taken in July and August 1918; Lomitas (3°38'N 76°38'W; on the Pacific slope of the West Andes, 13 km south-west of La Cumbre), where three males (in AMNH) were collected at 1,525 m in February and March 1911 (also Chapman 1917a); “km 18” or “El Dieciocho” (on the old Cali–Buenaventura road near the crest of the West Andes at c.1,800 m), whence come numerous recent records (Hilty and Brown 1986; also F. R. Lambert *in litt.* 1989, M. Pearman *in litt.* 1990, P. Kaestner *in litt.* 1992, G. Kattan *in litt.* 1992, L. G. Olarte *in litt.* 1992); Bitaco (3°36'N 76°36'W; at 1,350 m on the western slope of the West Andes), where four birds (in CM) were taken in July and August 1918; Mares (c.3°32'N 76°38'W; on the eastern slope near the crest of the West Andes, 12 km north-west of Cali), whence come two males (in UV); Ríolima (untraced, but apparently on the eastern slope of the West Andes near the following locality), where five birds (in AMNH) were taken between 1,220 and 1,525 m in June and August 1898 (also Meyer de Schauensee 1948-1952); San Antonio (3°30'N 76°38'W; on the eastern slope of the West Andes, 10 km north-west of Cali), where two males (in AMNH, USNM) were collected at 2,135 m in November 1907 and January 1911 (also Chapman 1917a), with more recent records from Miller (1963); La Castilla (3°30'N 76°35'W; at 1,600 m on the eastern slope of the West Andes), where a female (in AMNH) was collected in June 1898; and Pichindé (3°26'N 76°37'W; on the eastern slope of the West Andes, 10 km west-south-west of Cali), where a male (in YPM) was taken in February 1957, and near “Peñas Blancas” (untraced, but c.7 km from Pichindé), where birds have been seen as recently as March 1987 (M. Pearman *in litt.* 1990);

Cauca La Gallera (c.2°35'N 76°55'W; on the western slope of the West Andes), where a male (in AMNH) was collected in June 1911 (also Chapman 1917a); río Munchique (c.2°35'N 77°15'W: on the western slope of Cerro Munchique), whence comes a record at 900 m (Meyer de Schauensee 1948-1952); and El Tambo (2°25'N 76°49'W; on the eastern slope of the West Andes, below Cerro Munchique), where a male (in ANSP) was collected at 900 m in July 1938.

POPULATION The number of specimens taken at single localities (see above) suggests that the Multicoloured Tanager was historically at least locally common. Records from the second half of the twentieth century are almost exclusively from the Buga–Cali–Dagua area (i.e. Darién, Bosque de Yotoco, Pichindé and “km 18”) in the West Andes (see above), where the bird is found readily in the remnant forest patches, and is reported to be “still fairly numerous” and “fairly common locally” (Hilty and Brown 1986, Ridgely and Tudor 1989). This conclusion is reinforced by the most recent records (all years from 1987 to 1991) from Pichindé and km 18, where small groups of 2-5 birds can often be seen (F. R. Lambert *in litt.* 1989, M. Pearman *in litt.* 1990, P. Kaestner *in litt.* 1992, L. G. Olarte *in litt.* 1992), although the species is clearly present at much lower densities than other similar-sized tanagers (G. Kattan *in litt.* 1992). Despite intensive recent ornithological surveys on both slopes of the Central Andes (LGN), the record from Ucumarí Regional Park appears to be the only one from this mountain range since 1951, although the bird was apparently never widespread or common there (see above).

ECOLOGY The Multicoloured Tanager occurs in the subtropical zone primarily between 1,300 and 2,195 m, although there are records from 1,140 m in the Central Andes, and as low as 900 m in the West Andes (not the Pacific slope, *contra* Hilty and Brown 1986, Ridgely and Tudor 1989: see Distribution). The species inhabits humid, mossy, montane forest (cloud-forest), and is recorded regularly in mixed-species flocks at forest borders, adjacent tall second-growth woodland and clearings with a few large trees left standing (Hilty and Brown 1986, Ridgely and Tudor 1989, G. Kattan *in litt.* 1992); the area around km 18, near Cali (where the species is a permanent resident, and whence come most recent observations) is highly fragmented with forest patches ranging from 10 to 400 ha, in a matrix of second growth, pastures with scattered trees, and suburban houses (G. Kattan *in litt.* 1992).

Birds forage from middle to upper levels (upper understorey to subcanopy) in the forest, mostly in the crowns of trees (the median foraging height has been recorded at c.10 m, rarely descending below 4.5 m), where they typically cling to leaves of the outer foliage to glean the undersides of leaves in a warbler or vireo-like manner (Hilty and Brown 1986, Isler and Isler 1987, Ridgely and Tudor 1989). The Multicoloured Tanager is mostly recorded in pairs, less often singly or in small (family) groups (2-5 individuals: never in monospecific flocks), and is very often found in pairs associating with mixed-species flocks dominated by other tanagers (Isler and Isler 1987, Ridgely and Tudor 1989). Around km 18, G. Kattan (*in litt.* 1992) recorded lone birds (or pairs) comprising 42% of feeding records, of which 87% involved fruits (*Cordia*, *Miconia*, *Palicourea* and *Ficus*), and 13% insects; with the other 58% being of pairs (always) in large mixed flocks, of which 91% involved insects and 9% fruits. Other observations are of the bird eating arillate fruit (*Tovomita* sp.), pecking at green 10-12 mm berries, and feeding on flower clusters and small *Ficus* fruits, with insects comprising small larvae and hairy caterpillars (Miller 1963, Isler and Isler 1987). Birds move actively and rarely remain long in one tree (Isler and Isler 1987, Ridgely and Tudor 1989).

Miller (1963) suggested that the non-breeding period above Cali embraced the months from September to December, although in this same region G. Kattan (*in litt.* 1992) observed adults feeding juveniles in August 1990, and Hilty and Brown (1986) reported a stub-tailed juvenile with two adults on 1 November and a grown juvenile on 8 January; a male in breeding condition (in AMNH) was taken nearby on 28 January. In the Central Andes, three birds in breeding condition (and an immature) were collected in May and June (specimens in USNM), and a male (in AMNH) not in breeding condition was taken in November.

THREATS The Multicoloured Tanager is apparently threatened by habitat destruction (Isler and Isler 1987), and indeed its range is highly fragmented (Hilty 1985). To the west of Cali along the old Cali–

Buenaventura road, and at Pichindé, the forest exists only in small remnant patches (10-400 ha) that are being sold for conversion to building land and for cattle-grazing, and therefore this area is insecure (F. R. Lambert *in litt.* 1989, M. Pearman *in litt.* 1990, G. Kattan *in litt.* 1992). However, there are still extensive areas of seemingly suitable forest away from the roads in this area (M. G. Kelsey verbally 1992), and the species may well be relatively safe within such sites (see Ecology).

MEASURES TAKEN The species has been or may be recorded from several areas that are currently protected either within the national parks system or as other (often private) reserves, and are as follows:

Tatamá National Park (51,900 ha, in the Central Andes of Risaralda), which may well protect a number of the Risaralda department localities and apparently embraces suitable habitat (and altitudes) for the species, although there have been no records from the immediate vicinity of Cerro Tatamá since 1946 (Hernández Camacho *et al.* undated; see Distribution);

Ucumarí Regional Park (also in the Central Andes of Risaralda: see Distribution), protecting 4,240 ha of the buffer zone of Los Nevados National Park, and administered (protected and managed) by the Corporación Autónoma Regional de Risaralda (CARDER): the area includes primary and secondary forest (where this species has recently been seen) and pastures (which are currently being reforested), and is used for research, education and recreation (LGN);

Bosque Bremen (Quindío); a private “reserve” of unknown size (P. Ruiz verbally 1991);

Farallones de Cali National Park (150,000 ha, south-west of Cali, Valle), which is bounded along at least part of its northern edge by the old Cali–Buenaventura road, and as such incorporates localities where this species has been recorded (Reserva Hato Viejo, Pichindé–Peñas Blancas and Reserva La Teresita: G. Kattan *in litt.* 1992, Hernández Camacho *et al.* undated), the park itself being relatively inaccessible, protecting large areas of pristine and poorly known habitat where this species may well occur (M. G. Kelsey verbally 1992);

Bosque de Yotoco Reserve (559 ha) is a site where this species has recently been recorded, and is administered by the Corporación Autónoma Regional de Cauca (CVC) and Universidad Nacional de Colombia, which effectively protect it against poachers and colonists: the area is used for permanent environmental education programmes and some research (Areas Protegidas 1989, LGN);

Munchique National Park (44,000 ha, Cauca) which is in the immediate proximity of both Cauca records (although neither is actually from inside the park) and protects areas with suitable habitat (Hernández Camacho *et al.* undated), suggesting that the tanager may well occur within its boundaries.

MEASURES PROPOSED The priority for this tanager, which is relatively well known ecologically, is to determine its status in the protected areas mentioned above, and to assess the extent of remaining suitable habitat both in these areas and nearby. Any surveys in these areas, whether of this bird or of suitable habitats, should if possible also target other (at least partly sympatric) threatened species occurring there: these species are listed below under the protected areas in which they have been recorded:

Tatamá National Park: see equivalent section under Black-and-gold Tanager *Buthraupis melanochlamys*;

Ucumarí Regional Park: Cauca Guan *Penelope perspicax*, Yellow-eared Parrot *Ognorhynchus icterotis*, Golden-plumed Parakeet *Leptosittaca branickii* and Red-bellied Grackle *Hypopyrrhus pyrohypogaster* (see also Moustached Antpitta *Grallaria alleni*);

Farallones de Cali National Park (including Alto Anchicayá): possibly White-chested Swift *Cypseloides lemosi* (should be searched for), Banded Ground-cuckoo *Neomorphus radiolus*, Bicoloured Antvireo *Dysithamnus occidentalis*, Turquoise Dacnis *Dacnis hartlaubi* (possibly), Yellow-green Bush-tanager *Chlorospingus flavovirens* and Tanager-finch *Oreothraupis arremonops*;

Bosque de Yotoco: Cauca Guan and Turquoise Dacnis;

Munchique National Park (below 2,200 m) Cauca Guan *Penelope perspicax*, Bicoloured Antvireo and possibly White-chested Swift (the threatened species in this park occurring above 2,200 m are given in the equivalent section under Colourful Puffleg *Eriocnemis mirabilis*, and those below 1,000 m under Plumbeous Forest-falcon *Micrastur plumbeus*).