This little-known cloud-forest tanager is endemic to two disjunct areas of western Colombia, in one of which it has not been recorded since 1948, while in the other it survives in and around Tatamá National Park; birds have been recorded foraging in secondary habitats.

DISTRIBUTION The Black-and-gold Tanager is known from two disjunct areas in western Colombia, namely: on the north and western slopes of the Central Andes in Antioquia; and the western slopes of the West Andes in Chocó, Risaralda and Valle departments.

In Antioquia, the few localities where this species has been recorded are as follows (unless otherwise stated, coordinates are from Paynter and Traylor 1981): La Frijolera (c.7°10'N 75°25'W), where a male and two females (in AMNH) were taken at 1,525 m in December 1914 and January 1915 (also Chapman 1917a); in the vicinity of Valdivia (7°11'N 75°27'W; i.e. on the saddle between the Cauca and Nechí drainages), where birds (eight males and seven females, in USNM) were taken at 2,075-2,285 m near Ventanas (c.7°05'N 75°27'W) and at 1,525-1,675 m above Sevilla (untraced) during June 1948; and Yarumal (6°58'N 75°24'W; on the east slope of the Central Andes), a locality mentioned by Nicéforo-María and Olivares (1978).

Further south, this species has only been recorded in Risaralda at San Antonio de Chamí (Quebrada Sutú, north of Mistrató), where a bird was netted and others seen at 1,300 m (F. G. Stiles *in litt*. 1992); Alto de Pisones (24 km north-west of Mistrató), where birds were found between 1,400 and 1,750 m in May–June 1992 (F. G. Stiles *in litt*. 1992); above Mistrató (on the Pacific slope), where two birds were collected and others seen between 1,700 and 1,950 m in April–June 1992 (F. G. Stiles *in litt*. 1992); and from the vicinity of Cerro Tatamá (on the border of Chocó, Risaralda and Valle departments), where localities include: La Selva (4°55'N 76°09'W, on the Quebrada Jamarraya), where the type (a female collected in October 1909: Hellmayr 1910a) and subsequent specimens (in ANSP, ICN, LSUMZ, USNM) were taken between 1,380 and 2,135 m; and at c.1,500 m on the south-west slope in August 1987 (M. Pearman *in litt*. 1990); and nearby, at Alto del Oso (4°52'N 76°20'W: Vereda la Italia, municipality of San José del Palmar), where a specimen (in UV) was collected at 1,000 m in October 1987 (LGN; coordinates from M. S. Alberico verbally 1992).

POPULATION The Black-and-gold Tanager was, at least formerly, not uncommon in parts of its limited range (Hilty and Brown 1986): for example, 15 birds were taken near Valdivia during June 1948 (see above), although this northern population may now be extinct (see Threats). On Cerro Tatamá 11 birds were taken at La Selva in 1945 (Ridgely and Tudor 1989), and the bird was common in secondary forest undergrowth and plantain cultivations at Alto del Oso in Chocó department during October 1987 (groups of two, two, three and five individuals seen in three days: LGN); however, M. Pearman (*in litt.* 1990) saw just one during two days' searching in the same region and year. At La Selva, Ridgely and Tudor (1989) suggested that this species has been recorded with but is much commoner than Gold-ringed Tanager *Buthraupis aureocincta* (see relevant account). Above Mistrató, northern Risaralda, this species was found to be fairly common (in pairs and breeding) during April 1992 (two birds collected and various others seen), and at Alto de Pisones it was found to be common from 1,400 to 1,600 m, but uncommon to rare higher up during May and June 1992 (F. G. Stiles *in litt.* 1992).

ECOLOGY Records of this tanager come from between 1,000 and 2,285 m (Hilty and Brown gave its upper limit as 2,450 m), where it inhabits subtropical humid forest (cloud-forest) with heavy undergrowth (Hilty and Brown 1986), although it has also been recorded from disturbed primary and secondary forest, forest patches (down to c.4 ha in area), forest borders and cultivated land surrounded by primary forest (LGN, F. G. Stiles *in litt.* 1992). Near Mistrató in April–June 1992, F. G. Stiles (*in litt.* 1992) found the species to be most numerous between 1,400 and 1,600 m (the zone in which the forest changes from cloud- to subtropical forest), although he recorded it up to 1,750 m. On the south-western slope of Cerro Tatamá, M. Pearman (*in litt.* 1990) described the bird seen in August 1987 as inhabiting mossy cloud-forest (c.1,500 m), the individual being discovered preening in the subcanopy, and then observed foraging from this height down to 3 m (associated with a mixed feeding flock containing Wedge-billed

Woodcreeper *Glyphorynchus spirurus*, Red-headed Barbet *Eubucco bourcierii*, Scaly-throated Foliage-gleaner *Anabacerthia variegaticeps*, and Yellow-throated Bush-tanager *Chlorospingus flavigularis*); the bird was seen to feed on small clumps of berries. Near Mistrató, in the zone of overlap at c.1,600 m, the Black-and-gold Tanager was not usually associated with the same feeding flocks as Gold-ringed Tanager (see Ecology under this species). Also in 1987, pairs or groups of up to five individuals were seen searching actively for small fruit and insects at mid-levels, and on low palms and saplings in the undergrowth (LGN). Birds in breeding condition have been collected in Antioquia in June (seven males and three females in USNM), and December (one male in AMNH), and F. G. Stiles *in litt.* (1992) mentioned that birds were breeding (singing and carrying nest material) in the vicinity of Mistrató in April, with others singing at the end of May and beginning of June 1992 when also a juvenile was mist-netted; this could all indicate a two-peak breeding schedule coinciding with the rainy seasons, which run from May to June and September to October (Hilty and Brown 1986).

THREATS The almost complete deforestation of the area around Valdivia (Hilty and Brown 1986) has been cited as the cause for the possible extirpation of the northern population of the Black-and-gold Tanager (Isler and Isler 1987), and indeed there appear to be no records from this region since the 1940s (see Distribution). Evidence from around Cerro Tatamá and above Mistrató suggests that birds can utilize fragmented, disturbed or secondary habitat, at least for foraging (F. G. Stiles *in litt.* 1992; see Ecology), although nesting has only been recorded from lightly disturbed forest (F. G. Stiles *in litt.* 1992), and it therefore remains doubtful that the species can sustain viable populations without primary forest. The slopes of Cerro Tatamá are much more deforested than is the area around Mistrató (c.35-40 km north), which still comprises virgin forest above c.1,500 m (F. G. Stiles *in litt.* 1992).

MEASURES TAKEN The Tatamá National Park (51,900 ha), on the boundary of Chocó, Risaralda and Valle departments, established in 1987 (Hernández Camacho *et al.* undated), harbours a population of this species (see Threats).

MEASURES PROPOSED The integrity of forest within the Tatamá National Park needs to be ensured, and an extension to embrace more forest above 1,000 m is a priority. The status of the species and its habitat in the northern part of its range requires investigation in order to determine whether or not it still survives there, and whether any forest needs urgent protection. Surveys in the Mistrató area (including Alto de Pisones) are also warranted to determine the status of the bird and its habitat there: this area is apparently suitable for a reserve (and critical for the Gold-ringed Tanager), and the Corporación Autónoma Regional de Risaralda (CARDER) has been informed to this effect (F. G. Stiles *in litt*. 1992). The precise ecological requirements of this species need to be studied, notably the effects that secondary and disturbed habitats have upon its breeding success, but any studies within the Tatamá National Park and the Mistrató area should be undertaken in conjunction with those proposed for the Gold-ringed Tanager and ideally also the Multicoloured Tanager *Chlorochrysa nitidissima* and Red-bellied Grackle *Hypopyrrhus pyrohypogaster*, which have all been recorded in this area (see relevant accounts). Details of threatened species and proposals referring to Serranía de San Lucas, Antioquia, are given in the equivalent section under Chestnut-bellied Hummingbird *Amazilia castaneiventris*.