

This rare tyrant-flycatcher lives high above the treeline in Ecuador, Peru, Bolivia, northern Chile and north-western Argentina. Although reported as “common” in Ecuador last century, there is but one recent report from that country (possibly owing to lack of research at high elevations), but also in Peru and at the type-locality of the southern subspecies, in northern Chile, it appears to have diminished for reasons unknown.

DISTRIBUTION The White-tailed Shrike-tyrant (see Remarks 1) is known from some 42 specimens and a number of sightings at less than 50 localities, scattered throughout the mountains of Ecuador, Peru, Bolivia, north-west Argentina and northern Chile, with nominate *andicola* inhabiting Ecuador (where it has been recorded on most of the páramos), and *albicauda* occurring within the rest of the range. Coordinates below, unless otherwise stated, are from Paynter *et al.* (1975), Paynter and Traylor (1977), Stephens and Traylor (1983), and Paynter (1985, 1988), with records as follows:

Ecuador (*Imbabura*) Ilana, close to but north of Laguna de Yaguarcocha (at 0°22'N 78°06'W), where a specimen (in NRM) was taken at 2,440 m in July between 1900 and 1920 (also Lönnberg and Rendahl 1922); (*Pichincha*) Calacalí (c.0°01'N 78°31'W), in páramo at 3,600 m, on a northern spur of Volcán Pichincha, where a bird was taken in March 1859 (Sclater 1860b: specimen in BMNH now apparently lost); Cumbaya (0°12'S 78°26'W), where a specimen (in AMNH) was collected at 2,400 m in January 1914 (Chapman 1926); Quito (0°13'S 78°30'W), where a specimen (in AMNH) was collected at 2,800 m in August 1922 (Chapman 1926); Guamaní (c.0°20'S 78°13'W), at 3,600-4,200 m, where a specimen (in AMNH, now apparently lost) was presumably collected in 1922 or 1923 (Chapman 1926); (*Napo*) Antisana (c.0°30'S 78°08'W), where a specimen (in AMNH) was collected at 3,660 m in June 1913 (Chapman 1926); (*Chimborazo*) Panza, on the south slope of Volcán Chimborazo (at 1°28'S 78°48'W), where the type-specimen (in BMNH) was collected at 4,275 m in January 1859 (Sclater 1860a); (*Cañar*) Cañar (c.2°33'S 78°56'W), where a specimen (in BMNH) was collected at 3,000 m in April 1899 (Chubb 1919); (*Zamora-Chinchipe*) “Bestion, río Shingata” (presumably = río Shincata on Cerro Bastión, at 3°25'S 79°01'W: OG 1957b), near the borders of Morona-Santiago and Azuay provinces, where three specimens (in AMNH) were collected at 3,080 m in January 1921 (Chapman 1926; see Remarks 2); (*Loja*) Nudo de Cajanuma (4°05'S 79°12'W), whence comes a specimen (in MCZ) collected at 2,400 m in August 1965;

Peru (*Cajamarca*) 2 km south-east of Cutervo (6°23'S 78°50'W; at 2,650 m), where a specimen (in LSMZ) was collected in September 1977; Taulis (c.6°54'S 79°03'W), at 3,400 m, where a specimen (in MHNJP) was collected in February 1952 (T. S. Schulenberg *in litt.* 1989); Cajamarca (c.7°10'S 78°31'W), where a specimen (in AMNH) was collected at 3,350 m in January 1894 (Salvin 1895, von Berlepsch 1907, Cory and Hellmayr 1927); (*La Libertad*) Huamachuco (7°48'S 78°04'W), where a specimen (in AMNH) was collected at 3,350 m in March 1895 (Salvin 1895, von Berlepsch 1907, Cory and Hellmayr 1927); mountains near Otuzco (c.7°54'S 78°35'W), at 3,050 m, where a specimen (in FMNH) was collected in March 1912 (Cory and Hellmayr 1927); Hacienda Tulpo (c.8°08'S 78°01'W), at 3,000 m, where two specimens (in AMNH) were collected in May 1900 (von Berlepsch 1907, Cory and Hellmayr 1927); (*Huánuco*) base of Bosque Zapatogocha (c.9°40'S 76°03'W), at c.2,620 m, where a specimen (in LSMZ) was collected in September 1975; Acomayo (9°46'S 76°05'W), at 2,440 m, where a specimen (in FMNH) was collected in November 1965; (*Ancash*) near Carpa (9°53'S 77°17'W: IGM 1971), at 4,250 m, 5 km west of Ingenio in the Pumapampa valley, where one was seen in February 1987 (Fjeldså 1987); (*Pasco*) La Quinoa (10°36'S 76°10'W), at 3,660 m, where a specimen (in FMNH) was collected in May 1922 (Cory and Hellmayr 1927); Rumicruz (c.10°44'S 75°55'W), at 2,950 m, where four specimens (in AMNH) were taken in February and March 1922 (Zimmer 1937); (*Cuzco*) Cachupata (c.13°17'S 71°22'W), at 3,555 m (Sclater and Salvin 1874); Cordillera Vilcanota, above Calca, whence comes a recently collected specimen (J. Fjeldså verbally 1991); Lucre (= Laguna de Lucre, at 13°31'S 71°59'W), at 3,640 m, 32 km south of Cuzco (von Berlepsch 1907); La Raya (14°29'S 71°05'W), at 4,314 m, on the border of Cuzco and Puno departments, where six specimens (in AMNH and USNM)

Threatened birds of the Americas

were collected in April 1917 (Chapman 1921); (*Arequipa*) slopes of Volcán Chachani (c.16°12'S 71°33'W), where a specimen (in MHNJP) was collected in February 1952 (T. S. Schulenberg *in litt.* 1989);

Bolivia (*La Paz*) Iquico, Illimani (c.16°35'S 67°40'W), at 4,000 m (von Berlepsch 1907); Esperanza, Pacajes (17°49'S 68°47'W), at 4,200 m, where a specimen (in LSUMZ) was taken in November 1941; (*Oruro*) c.4 km north-west (or west) of Curahuara (17°52'S 68°26'W: OG 1955a), Carangas, at 3,900 m, where a specimen (in AMNH) was taken in October 1967; (Chuquisaca) near Uzurduy (20°06'S 64°25'W: IGM 1984), at 2,700 m, where a bird was seen in October 1991 (J. Fjeldså verbally 1991); (*Potosí*) Mina Isca-Isca (21°11'S 65°47'W), above La Torre (north of Tupizá), at 4,000 m, where a specimen (in AMNH) was collected in December 1967.

Argentina Records are all from the Sierra del Aconquija in Tucumán and adjacent Catamarca province, localities being: (*Tucumán*) El Infiernillo (c.26°44'S 65°47'W), at 3,000 m, where two birds were seen in May 1948 (Olrog 1949); Cerro Muñoz (26°46'S 65°51'W), at 3,800-4,100 m, where a specimen (in IML) was collected in May 1906 (also Lillo 1909, Olrog 1949, M. Nores and D. Yzurieta *in litt.* 1986); above Tafí del Valle (26°52'S 65°41'W), at 2,900 m, where a specimen (in AMNH) was collected in April 1916, with two (in IML) taken in May and June 1952 (Zimmer 1937, M. Nores and D. Yzurieta *in litt.* 1986); (*Catamarca*) Corral Quemado (27°08'S 66°57'W), at 3,500 m, where a specimen (in MCZ) was taken in December 1918.

Chile The type-specimen of *albicauda* (in MNHNS) was collected in the middle of last century at Putre (18°12'S 69°35'W), in the mountains of Arica department, northernmost Tarapacá province (Philippi and Landbeck 1863, J. C. Torres-Mura *in litt.* 1988), with another specimen (in AMNH) taken there at 3,535 m in July 1924 (Cory and Hellmayr 1927, 1932), and subsequent sightings mentioned by Johnson (1967). In the Lauca National Park, three birds were seen in October 1986 and November 1987 in the vicinity of Laguna Chungará (18°15'S 69°10'W) (B. M. Whitney *in litt.* 1991), with two birds seen between Laguna Chungará and Parinacota (18°12'S 69°16'W) in March 1989 (P. J. Roberts *in litt.* 1989). In Antofagasta province, a specimen (in YPM) was taken at "Linzor, on the outskirts of the Ojalar river" (c.22°13'S 68°01'W), at 4,100 m, in June 1957 (Peña 1961).

POPULATION In Ecuador, the White-tailed Shrike-tyrant was reported to be common on Volcán Chimborazo and the Calacalí páramo on Volcán Pichincha, in the middle of the last century (Sclater 1860a,b), but there appears to be but one recent record from that country (see Distribution), although this could, at least in part, be owing to lack of research at high elevations.

At La Raya in Peru, no less than six birds were collected in 10 days during 1917, so it was then presumably fairly common; however, during five days of intensive searching there in 1983 and 1987 only the Black-billed Shrike-tyrant *Agriornis montana* was found (NK, Fjeldså 1987). The species was considered "uncommon" in Peru by Parker *et al.* (1982), but a four-month survey of its habitat in Peru, Bolivia and Chile in 1987 showed it to be rare, with just one or two records in over 50 localities with apparently suitable habitat, whilst *montana* was recorded at 27 (Fjeldså 1987). In Bolivia, *andicola* is reported to be outnumbered 10:1 by *montana* (Smith and Vuilleumier 1971).

Johnson (1967) reported *andicola* to be "more plentiful" than *montana* in the neighbourhood of Putre in Chile, but he did not report collecting any specimens, and either he misidentified *montana*, or *andicola* has declined seriously there, for eight individuals of *montana* were seen in the same region in May 1987 (NK), when there were no records of *andicola* (Fjeldså 1987): however, P. J. Roberts (*in litt.* 1989) reported two individuals of *andicola* and no *montana* there in March 1989. Near Laguna Chungará in Lauca National Park, B. M. Whitney (*in litt.* 1991) recorded just three birds in October 1986 and November 1987, and considered this species greatly outnumbered by *montana*: P. Gregory (*in litt.* 1990) recorded two birds there in January 1990, and suggested that the species was "very sparse". M. Nores (*in litt.* 1989) believed all reports of *andicola* as common to be caused by confusion with *montana*.

ECOLOGY The White-tailed Shrike-tyrant inhabits the páramo and puna zones, usually above 3,500 m, but in southern Ecuador and north-west Argentina, where the treeline is lower (NK), it occurs down to 3,000 m (see Distribution): records from open areas as low as 2,400 m are undoubtedly of stragglers from higher elevations (NK). It is found on open slopes and valley floors supporting a sparse, xeric vegetation of low shrubs, with scattered rocks and boulders used as observation posts (Smith and Vuilleumier 1971): a bird seen in Ancash, Peru, was perched atop a *Puya raimondii* on a rocky slope with scattered bunchgrass (NK). Like its congeners it is solitary and holds a large territory (Fjeldså and Krabbe 1990).

Its larger congeners take most of their prey from the ground, including large insects, small mammals, lizards, frogs, eggs and nestlings of other birds (Fjeldså and Krabbe 1990). One specimen of *andicola* had a large white grub in its gizzard (Sclater 1860a). Throughout its range the White-tailed Shrike-tyrant occurs sympatrically with the slightly smaller but notably smaller-billed Black-billed Shrike-tyrant (Traylor 1979), and some competition between the two could be expected, although B. M. Whitney (*in litt.* 1991) suggested that *andicola* occurs on average slightly higher than *montana*.

No nest has been described, but congeners build their nest of sticks and grass and line it with wool, placing it in a rock-crevice or low in a bush (Fjeldså and Krabbe 1990). Specimens with inactive gonads have been taken in February and March in Junín; April in Cuzco, Puno and Tucumán; August in Loja; September in Cajamarca; and October in Oruro; one with slightly enlarged gonads was collected in December in Potosí, and one with greatly enlarged gonads in June in Napo (label data on specimens in AMNH, LSUMZ, MCZ and USNM).

THREATS None is known. If the species has truly declined, the cause of this is not apparent, although it is possible that it may have been dependent on the now highly fragmented stands of *Polylepis* and larger species of *Puya*, which are both important refuge habitats for several potential prey species of birds (J. Fjeldså verbally 1991).

MEASURES TAKEN The White-tailed Shrike-tyrant is known to occur in Huascarán National Park in Ancash, Peru (340,000 ha) (Fjeldså 1987, IUCN 1992: see Measures Taken under Ash-breasted Tit-tyrant *Anairetes alpinus*), and in Lauca National Park, northern Chile (137,900 ha) (IUCN 1992).

MEASURES PROPOSED All aspects of this species's ecological requirements need assessment (including the extent to which it may rely on stands of *Polylepis* and *Puya*) before a better explanation for its apparent rarity and specialized habits can be developed. Ecological surveys should perhaps concentrate in the two national parks where the species is known to occur, and aim to assess the size and viability of the populations there: the integrity of the habitats in these two areas also needs to be ensured. In Huascarán National Park, the threatened *Polylepis*-adapted Ash-breasted Tit-Tyrant, White-cheeked Cotinga *Zaratornis stresemanni* and Plain-tailed Warbling-finch *Poospiza alticola* also occur, and elsewhere within its range this species probably occurs sympatrically with Royal Cinclodes *Cinclodes aricomae* and White-browed Tit-spinetail *Leptasthenura xenothorax* (see relevant accounts), both *Polylepis* specialists; any conservation initiatives developed for this species should consider their interests.

In Argentina the implementation of the planned national park in the Nevados del Aconquija (Beltrán 1987) would protect populations of this species, Rufous-throated Dipper *Cinclus schulzi* and Tucumán Mountain-finch *Poospiza baeri* (J. C. Chebez *in litt.* 1992; see relevant accounts).

REMARKS (1) Sclater (1860a) described the species under the name *andicola*. Believing *andicola* to be a homonym of *andecola*, a name given to another species of *Agriornis* by d'Orbigny (1835-1844), he later proposed substituting the name *andicola* with *pollens* (Sclater and Salvin 1869), a name used for the species until 1926, when it was shown that the name *albicauda* (Philippi and Landbeck 1861) had been given to the same species (Cory and Hellmayr 1927, 1932). The name *albicauda* has been used for the species by several subsequent authors (e.g. Meyer de Schauensee 1970, Morony *et al.* 1975), although it was pointed out by Zimmer (1937) and again by Traylor (1979) that *andicola* (being derived from the Latin “Andium”) and *andecola* (being derived from the French “Andes”) are not homonyms.

Threatened birds of the Americas

(2) The locality along río Shingata, Bestion, was not located by Paynter and Traylor (1977), who suggested that it might be the village Bestión at 3°10'S 79°13'W, although Chapman (1926) showed Bestion to be south-east of Oña, which is at 3°32'S 79°10'W (Paynter and Traylor 1977). However, in OG (1957b) it is stated that Bestion is another name for Cerro Bastión at 3°25'S 79°01'W on the border of Azuay, Morona-Santiago and Zamora-Chinchiipe provinces, which is in better agreement with Chapman's directions. OG (1957b) lists no río Shingata, but this may be the río Shincata shown on IGM (1981) to rise on Cerro Bastión, run south in Zamora-Chinchiipe province along the border of Azuay, and then turn south-east to join río Yacuambi, an affluent of río Zamora.