

BLACK-THROATED BLUE ROBIN

Luscinia obscura



Critical —
Endangered —
Vulnerable C1

This poorly known species qualifies as Vulnerable because it is inferred to have a small, declining population as a result of destruction of temperate forest through logging and conversion to cultivation and pasture.

DISTRIBUTION The Black-throated Blue Robin (see Remarks 1) breeds in the mountains of south-west China, with presumed non-breeding records from southern China and northern Thailand.

■ **CHINA** This species is known by a handful of breeding-season records from southern Gansu, north-central Sichuan and southern Shaanxi, and from Yunnan where it is presumed to be a passage migrant. Records (by province) are from:

■ **Gansu Min Xian county** (presumably “Ming-djau district”), four males collected at Yodzam-pu gorge, one of which was associated with four unfledged young found on the ground in a bamboo thicket, “which had evidently fallen out of a nest”, 3,050–3,350 m, August



The distribution of Black-throated Blue Robin *Luscinia obscura*: (1) Min Xian county; (2) Baihe Nature Reserve; (3) Jiuzhaigou Nature Reserve; (4) Shulingou; (5) Wolong Biosphere Reserve; (6) Mengzi county; (7) Taibai Shan; (8) Chiang Saen.

○ Historical (pre-1950) ● Fairly recent (1950–1979) ● Recent (1980–present)

c.1886, in bamboo thickets on the tops of ridges dividing the valleys (Deditius 1897, Dresser and Morgan 1899);

■ **Sichuan Baihe Nature Reserve**, Nanping county, male seen and heard singing, May 1985 (Buck 1985, B. F. King *in litt.* 1987); **Jiuzhaigou Nature Reserve**, Nanping county, male at “swan lake”, June 1984 (Beaman 1984, S. Madge *per* M. A. S. Beaman *in litt.* 1988); **Shulingou**, female collected, June 1931, identified as the previously unknown female of this species “by a process of elimination” (Stone 1933); **Wolong Biosphere Reserve**, Wenchuan county, male, May 1991 (D. Wilson, M. Leven and A. Brown verbally 1991);

■ **Yunnan Haozhiba** (not mapped), Yongshan and Dagan counties, male and female, 2,220 m, May 1997, in secondary scrub (Dowell *et al.* 1997; see Remarks 2); **Mengzi county**, adult female collected, May 1921 (La Touche 1922a), “probably on migration” (Cheng Tso-hsin 1987);

■ **Shaanxi Taibai Shan** (Tai-pai Shan), Qinling (Tsinling) Shan, four adult males collected “half way up”, late May and July 1905 (Hartert 1907b, specimens in AMNH and BMNH).

■ **THAILAND** This species is known by two records from Thailand, and a third unconfirmed record, where it is assumed to be a passage migrant or winter visitor: Nong Bong Khai (Bung Khai), **Chiang Saen** district (7 km south of the town), Chiang Rai province, female collected, 400 m, February 1965 (Ripley and King 1966); Mae Jarim National Park (not mapped), Nan, c.300 m, male and female observed drinking at a small stream in lowland forest, March 2000 (*Oriental Bird Club Bull.* 32 [2000]: 66-76); Doi Inthanon, a few kilometres below the first checkpoint, female seen, probably this species, December 1981 (C. S. Balchin *in litt.* 1988).

POPULATION There is virtually no information available on the population of this exceptionally poorly known species. The paucity of records suggests that it is probably highly localised in distribution and could have a small total population, and it is likely to have declined because of habitat loss.

ECOLOGY Habitat The habitats and altitudinal range of the Black-throated Blue Robin are very poorly understood, but the paucity of records suggests that it probably has specialised requirements. In Gansu, it has been recorded in bamboo thickets on the tops of ridges dividing valleys, at 3,050–3,350 m (Dresser and Morgan 1899). The more recent records from elsewhere in the presumed breeding range, in Shaanxi and Sichuan, appear all to be from areas of temperate-zone forest (see Distribution), but no further information on its habitats appears to have been published. Outside the breeding season, it has been recorded in Thailand at 400 m (in the “plains or foothills”) (Ripley and King 1966) and at c.300 m by a small stream in lowland forest (*Oriental Bird Club Bull.* 32 [2000]: 66-76).

Food There is no information.

Breeding Four unfledged young were found on 2 August on the ground in a bamboo-thicket, “which had evidently fallen out of a nest” (Dresser and Morgan 1899). The female collected in Thailand had “active ovaries” in February (USNM label data), presumably in advance of northward spring migration.

Migration The few records of this species indicate that it probably breeds in south-west China and winters somewhere in South-East Asia. It has been recorded on the presumed breeding grounds in China between May and August (see Distribution). The records in Yunnan and Thailand have been assumed to involve non-breeding birds (e.g. by Cheng Tso-hsin 1987).

THREATS The Black-throated Blue Robin is one of five threatened members of the suite of 10 bird species that are entirely restricted to the “Central Sichuan Mountains Endemic Bird Area”, threats and conservation measures in which are profiled by Stattersfield *et al.* (1998).

Table 1. Changes in the extent of natural habitats within this species's range in south-west China. The data in this table are reproduced from MacKinnon *et al.* (1996), and show the estimated areas (both original and remaining in km²) of presumably suitable habitats within this species's known breeding range, and the area of each habitat estimated within existing protected areas. However, it is important to note that this only gives an indication of the extent of reduction of presumed habitats, as there is no information on the time-scale over which they have been lost, and this species does not necessarily occur throughout each habitat in each province.

Province	Habitat	Original	Remaining	%	Protected	%
Gansu	cold coniferous forest	16,351	12,190	75	3,820	23.4
Gansu	temperate coniferous forest	398	40	10	0	0
Gansu	deciduous broadleaf forest	43,959	13,646	31	1,771	4.0
Sichuan	deciduous broadleaf forest	55,413	3,887	7	1,623	2.9
Sichuan	cold coniferous forest	100,213	57,459	57	2,319	2.3
Sichuan	deciduous/evergreen broadleaf forest	34,461	4,048	12	2,123	6.2
Sichuan	montane evergreen oak forest	9,292	6,504	70	46	0.5
Shaanxi	deciduous broadleaf forest	78,364	27,940	36	1,197	1.5
Shaanxi	temperate coniferous forest	9,139	5,713	63	92	1.0

Habitat loss The main threat to this species is likely to be the loss and fragmentation of its forest habitat. Forest cover has declined rapidly in Sichuan since the late 1960s, because timber quotas have consistently been set above sustainable levels, and forest has been cleared for cultivation and pasture; the province's forest cover is estimated to have declined from 19% to 12.6% between the early 1950s and 1988, mature natural forest being particularly affected (Smil 1984, 1993). Substantial areas of the temperate-zone forests where this species is assumed to breed have been lost (Table 1). Nong Bong Khai (in Thailand) supported significant areas of secondary forest at the time the specimen of this species was collected there, but it has since been completely deforested and subjected to intensive agriculture and development of tourist resorts (P. D. Round *in litt.* 1998).

MEASURES TAKEN Legislation In Thailand, the species is protected under WARPA.

Protected areas Mainland China The breeding range of Black-throated Blue Robin overlaps with the northern part of the current distribution of giant panda *Ailuropoda melanoleuca* (Zhao Ji *et al.* 1990). Like this bird, the giant panda occurs in temperate-zone forests with a bamboo understorey, and several of the reserves which have been established for it, and for other large mammals, such as takin *Budorcas taxicolor* and golden monkey *Rhinopithecus roxellanae*, contain areas of potential habitat for this species. However, the distribution and abundance of Black-throated Blue Robin within these reserves is poorly known, and it is only recorded from the following protected areas: in Sichuan, Jiuzhaigou Nature Reserve (200 km², forests apparently mostly in excellent condition, but under pressure from large-scale tourism) and Baihe Nature Reserve (200 km², forests apparently in good condition except in the valleys and northern face of the reserve); in Shaanxi, Taibai Shan National Nature Reserve (563 km², forests apparently in good condition) (sizes and condition from MacKinnon *et al.* 1996). **Thailand** In its presumed non-breeding range in Thailand, it has recently been recorded from Mae Jarim National Park, and there is a possible record from near Doi Inthanon National Park (see Distribution).

MEASURES PROPOSED Legislation Black-throated Blue Robin should be listed as a nationally protected species in mainland China.

Protected areas MacKinnon *et al.* (1996) made the following recommendations for the protected areas where this species has been recorded: at Jiuzhaigou Nature Reserve, strengthen protection and linkage with other important protected areas in the Min Shan, and control tourism in the reserve; at Baihe Nature Reserve, strengthen protection and link with Jiuzhaigou

and other reserves in the Min Shan; and at Taibai Shan National Nature Reserve, strengthen connections and cooperative management with Zhou Zhi Jin Si Hou National Nature Reserve, and manage with other reserves (both existing and proposed) as part of a large single Qinling Shan conservation unit. MacKinnon *et al.* (1989) also made detailed recommendations for the extension of the protected areas system within the range of the giant panda.

Habitat management MacKinnon *et al.* (1989) made several recommendations designed to protect and improve the quality of giant panda habitats, which could also be of benefit to the conservation of Black-throated Blue Robin, including: the reduction of human activity within giant panda habitat; limitation and control of logging; control against fire; and restoration of damaged habitats.

Research Studies are required to establish the habitat requirements, altitudinal range and population status of this species (and the other threatened birds of the temperate-zone forests of Sichuan and adjacent provinces: Rufous-headed Robin *Luscinia ruficeps*, Snowy-cheeked Laughingthrush *Garrulax sukatschewi* and Rusty-throated Parrotbill *Paradoxornis przewalskii*). Surveys are required to establish whether it occurs in any of the other protected areas in or near its known breeding range, including: in Sichuan, Huanglongsi Nature Reserve (400 km², “important forests” in the reserve), Wanglang Nature Reserve (332 km², forests apparently in good condition), Tangjiahe Nature Reserve (400 km², forests apparently “somewhat damaged but valuable”), Tiebu Nature Reserve (200 km²) and Xiaozhaizigou Nature Reserve (67 km², forests apparently in good condition but rather small); in Gansu, Baishuijiang National Nature Reserve (2,137 km², forests apparently in very good condition), Jianshan Nature Reserve (100 km², forests apparently in good condition) and Touersantan Nature Reserve (319 km², forests apparently in very good condition); in Shaanxi, Foping Nature Reserve (292 km², forests apparently in quite good condition), Niubeiliang Nature Reserve (165 km², forests apparently in good condition) and Zhou Zhi Jin Si Hou National Nature Reserve (529 km², forests apparently in good condition) (sizes and condition from MacKinnon *et al.* 1996).

REMARKS (1) Goodwin and Vaurie (1956) suggested that Black-throated Blue Robin and Firethroat *Luscinia pectardens* are colour phases of a single species, but these forms are now generally considered to be good species (e.g. by Sibley and Monroe 1990, 1993, Inskipp *et al.* 1996). Vaurie (1955) discussed the nomenclature of Black-throated Blue Robin. (2) There appears to be some dispute about the validity of this record.