

YELLOW-THROATED BULBUL

Pycnonotus xantholaemus



Critical —
Endangered —
Vulnerable C1; C2a

This bulbul has a small, declining, severely fragmented population, owing to destruction and degradation of its scrub and forest habitats, which qualifies it as Vulnerable.

DISTRIBUTION The Yellow-throated Bulbul is endemic to southern peninsular India, where it is patchily distributed (Abdulali 1949, Ali and Ripley 1968–1998, Gaston 1985a, Subramanya *et al.* 1995).

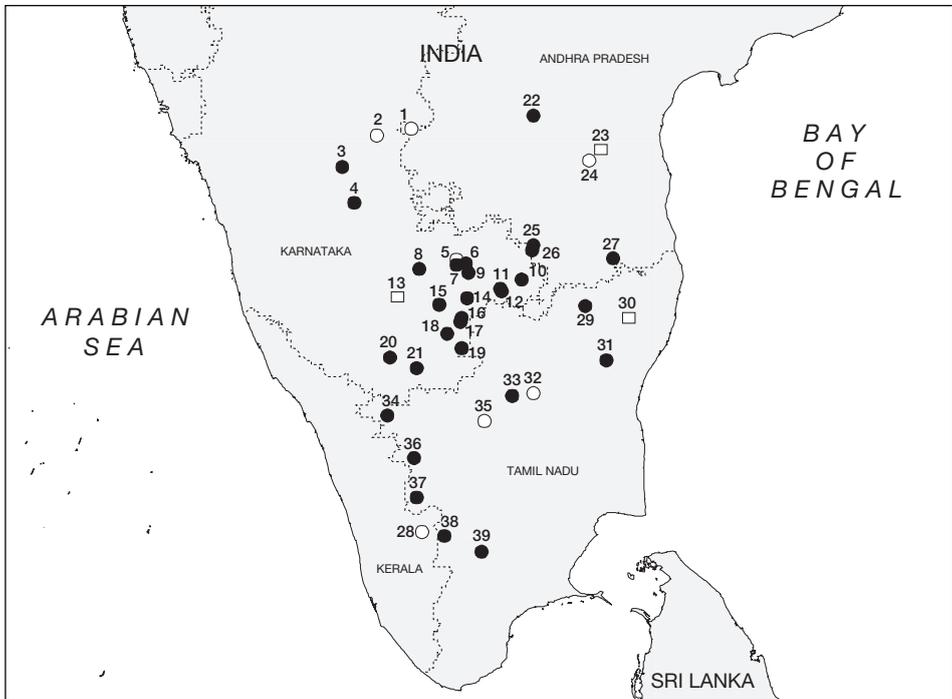
■ **INDIA** All recent records are confined to an area south of 16°N and east of 76°W in four southern Indian states: Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. Most records come from the Eastern Ghats, with a few from the outer reaches of the Western Ghats (Davison 1888, Nichols 1943–1945, Ali 1969, Kannan 1992). Occurrence of the species on the giant rocky outcrop found amidst moist deciduous forest at Biligirirangan hills indicates that it might be found in similar situations even in denser forests of the Western Ghats (Subramanya *et al.* in prep.). Although Ali and Ripley (1968–1998) suspected that it might also occur in Orissa, there have been no confirmed reports from this state. Nevertheless, areas of apparently suitable habitat were observed west of Khallikot, in the Ganjam district of Orissa, in October 1998 and its occurrence there is perhaps not unlikely (Subramanya *et al.* in prep.). Records are from:

■ **Karnataka Bellary**, c.20 pairs, June 1901 (footnote to Allen 1908), and near Bellary at Mathunga hill, Hampi, c.500 m, two, June 1990 (Subramanya *et al.* in prep.); **Ramandurga** (Ramandrug), near Sandur, May 1919 (Ali and Whistler 1942–1943, specimen in ROM), but no further records from Sandur district (Ghorpade 1974); **Arasikeri**, two, March 1992 (Subramanya *et al.* in prep.); **Jogimaradi** (Jogimatti), Chitradurga (Chitaldrug), January 1940 (specimen in BNHS, Ali and Whistler 1942–1943), November 1991 (S. Karthikeyan and T. S. Srinivasa verbally 1996); **Thondebhavi**, November–December 1939 (Ali and Whistler 1942–1943, specimens in BMNH), but now absent (Subramanya *et al.* 1990); **Narasimhadevarabetta Range Forest**, Kolar district, six in southern portion, and 12 in northern portion, September 1990 (Subramanya *et al.* in prep.) and Narasimhadevarabetta, Channapatna taluk, a nesting pair, June 1999 (Venkataswamappa and Chaitra 1999); **Makalidurga**, two, December 1991 (Subramanya *et al.* in prep.); **Devarayanadurga** (Devarayanadurga State Forest), Tumkur, 850–1,250 m, October 1990 (Prasad *et al.* 1992), 1998 (Pittie 1998); **Nandi hills**, mid-1980s (*Newsletter for Birdwatchers* 30, 11/12 [1990]: 1–2), eight, October 1991 (Subramanya *et al.* 1991); **Kanganahalli betta** (Kaivara), eight, July 1991 (Subramanya *et al.* in prep.); **Kendatti State Forest**, two, October 1990 (Subramanya *et al.* in prep.); **Antargange State Forest**, 10, October 1990 (Subramanya *et al.* in prep.); **Adichunchanagiri**, 17, undated (Prasad *et al.* 1991); **Kundana hills**, c.1,000 m, two, August 1992 (Subramanya *et al.* in prep.); **Savandurga**, one, July 1988 (Karanth 1989), 33, October 1990 (Subramanya *et al.* in prep.); **Ragihalli State Forest** two, January 1991 (Subramanya *et al.* in prep.); **Shvinahalli hills**, eight, and nearby at Doddibetta, four, October 1990 (Subramanya *et al.* in prep.); **Bananthimari**, nine birds, December 1990 (Subramanya *et al.* in prep.); **Darshna hills**, two, November 1990 (Subramanya *et al.* in prep.); **Chamundi hill**, two birds heard, March 1992 (Subramanya *et al.* in prep.); **Biligirirangan hill**, 1–2, August and October 1992 (Karthikeyan *et al.* 1995);

■ **Andhra Pradesh Udayagiri**, undated (two specimens in Madras Museum, Satyamurthi 1970); “the Eastern Ghats west of Nellore”, undated (Jerdon 1862–1864, type specimen in BMNH), this presumably equating to the **Veliconda range**; **Horsely hill** (Horselykonda; see Remarks 1), Chittoor, May 1904 (Whistler and Kinnear 1931–1937), April–June 1908 (Allen 1908, specimens in BNHS), and more recently 60 birds estimated, October 1991 (Subramanya and Prasad 1996); **Rishi valley**, Chittoor district, June 1991 (Rangaswami and Sridhar 1994); Tirumala hills, including **Sri Venkateshwara Wildlife Sanctuary**, four birds seen, undated (*Newsletter for Birdwatchers* 31[9/10]: 2), June 1994 (Subramanya *et al.* in prep., S. Balachandran verbally 1997);

■ **Kerala** Anaimalai hills, undated (Davison 1888), apparently “in the neighbourhood of” **Devikulam**, although thought to be an “aberrant straggler” in this region (Ali and Whistler 1935–1937);

■ **Tamil Nadu** (see Remarks 2) Vallai Mallai temple, near **Vellore**, two, March 1987 (Watts 1987, B. Watts *in litt.* 1999); **Mamandur** forests and Penchalakona hills, undated (V. J. Rajan *in litt.* 1988); **Gingi hills** (Gingee), where found within the Muttanadu Range Forest, South Arcot, July 1978, December 1979 (Rao 1980, 1981), September 1992 (V. Santharam verbally



The distribution of Yellow-throated Bulbul *Pycnonotus xantholaemus*: (1) Bellary; (2) Ramandurga; (3) Arasikeri; (4) Jogimaradi; (5) Thondebhavi; (6) Narasimhadevarabetta Range Forest; (7) Makalidurga; (8) Devarayanadurga; (9) Nandi hills; (10) Kanganahalli betta; (11) Kendatti State Forest; (12) Antargange State Forest; (13) Adichunchanagiri; (14) Kundana hills; (15) Savandurga; (16) Ragihalli State Forest; (17) Shvinahalli hills; (18) Bananthimari; (19) Darshna hills; (20) Chamundi hill; (21) Biligirirangan hill; (22) Mathunga hill; (23) Udayagiri; (24) Veliconda range; (25) Horsley hill; (26) Rishi valley; (27) Sri Venkateshwara Wildlife Sanctuary; (28) Devikulam; (29) Vellore; (30) Mamandur; (31) Gingi hills; (32) Chitteri hills; (33) Yercaud; (34) Mudumalai Wildlife Sanctuary; (35) Sankaridrug; (36) Sirvani range; (37) Monkey falls; (38) Bodinayakanur; (39) Madura district.

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

1995), and regularly around Gingi Fort (B. F. King verbally 1998); **Chitteri hills** (Chettiri hills), June 1929 (Whistler and Kinnear 1931–1937, specimen in BNHS); **Yercaud**, near Salem, Shevaroy hills, 13 occasions, January–July 1992 (Karthikeyan 1995); **Mudumalai Wildlife Sanctuary**, at Mavinahalla, 1996 (V. Gokula verbally 1997); **Sankaridrug** (Sankaridurga), September 1902 (specimen in BMNH, Whistler and Kinnear 1931–1937); **Sirvani range**, Coimbatore, November 1996 (V. Gokula verbally 1997); **Monkey falls**, just above Aliyar dam, on the Pollachi–Valparai road, 28 km from Pollachi, Anaimalai hills, a pair in May 1992 (Kannan 1992), but not found in subsequent searches of the area (Kannan 1998); 13 km from **Bodinayakanur** and 53 km east of Munnar, three, December 1994 (Gee 1995), and regularly in recent years, including one, February 1997 (A. Prasad *in litt.* 1999), 7–8, January 1998 (H. Hendriks *in litt.* 1999); **Madura district** (Madurai), in the “Lower Palni hills”, November 1944 (Nichols 1943–1945), and November 1993 (A. Robertson verbally 1996).

POPULATION The species has long been overlooked owing to its skulking behaviour and the general paucity of ornithological fieldwork in the region it inhabits, but it is generally “uncommon and patchily distributed” (Whistler and Kinnear 1931–1937, Ali and Whistler 1942–1943). However, in the early twentieth century it was “not uncommon” on Horsely hill (Allen 1908), and it remains common there today (Subramanya *et al.* in prep.). Moreover, in a survey of 18 localities in the 1990s, it was common wherever the habitat proved to be relatively intact (Subramanya *et al.* 1995, in prep.), leading to the conclusion that the species is “common, but very local” (Grimmett *et al.* 1998). Total numbers cannot be high and they must be decreasing, since habitat is very limited and continually being cut back (Subramanya *et al.* in prep.; see Threats).

ECOLOGY Habitat This bulbul inhabits “sparse thorn scrub, interspersed with some large trees among broken stony hillocks” (Ali and Whistler 1942–1943). It occurs on the scrubby boulder-strewn hill ranges or isolated hillocks of the inland Deccan plateau, rarely being found in level lowland areas; the low vegetation it inhabits varies from dry deciduous to moist deciduous in type (Ali 1942, Subramanya *et al.* 1995, in prep.). Despite its shy nature, it often sits quite openly on boulders, and is often seen on steep slopes, sometimes with dense vegetation, at other times with only stunted trees growing out of cracks in the rock (Subramanya *et al.* 1991, in prep.). It is apparently associated with five different vegetation types (Subramanya *et al.* in prep.; see also Subramanya *et al.* 1991, 1993, 1995): (1) open sparse scrub dominated by tall *Euphorbia nivulia* bushes, *Cymbopogon* grass clumps and *Ipomoea* creepers (e.g. Mathunga hills); (2) open thorn scrub dominated by *E. nivulia*, *Pterolobium hexacantha*, *Lantana* and *Securinega* (e.g. Kendatti State Forest, Antharagange State Forest) and dense thorn scrub dominated by *Santalum album*, *Gymnosporia montana*, *Argyrogena cuneata*, *Dodonaea viscosa*, *Toddalia*, *Erythroxylon monogynum*, *P. hexacantha*, *Lantana*, *Securinega*, *Ziziphus*, *Canthium* etc. (e.g. Savanadurga (upper elevation)); (3) southern thorn scrub interspersed with trees like *Schefflera*, *Wrightia tinctoria*, *Gmelina arborea*, *Ficus*, *S. album*, *P. hexacantha*, *Lantana*, *Securinega*, *Ziziphus* and *Canthium* (e.g. Devarayanadurga, Nandi hills, Horsely hills); (4) mixed forest with open to dense scrub with a greater proportion of trees and bamboo (*Dendrocalamus*) and dense *Lantana* undergrowth (e.g. Savanadurga valley, Shivanahalli hills); and (5) moist deciduous forest encompassing giant rocky outcrops with clumps of *Ficus* growing out of cracks and crevices found amidst a moist deciduous forest dominated by bamboo, *Ficus*, *Terminalia*, *Gmelina*, *Lantana*, etc. (e.g. Biligirirangan and Shevaroy hills). Karthikeyan *et al.* (1995) observed the species on Biligirirangan hill in dense vegetation comprising *Citrus maxima*, *Ricinis*, *Schefflera*, *Sterculia*, *Acacia coccinea* and *Lantana*.

Food The Yellow-throated Bulbul consumes both fleshy berries and insects; it appears that a significantly greater proportion of berries are taken from shrubs than trees (Subramanya *et*

al. in prep.). Recorded berries are from *Lantana camera*, *Securinega leucopyrus*, *Toddalia asiatica*, *Erythroxylon monogynum*, *Solanum indicum*, *Santalum album*, *Ziziphus*, *Ficus benghalensis*, *F. nervosa*, *F. montana*, *Canthium dicoccum* (Karthikeyan 1995, Subramanya *et al.* in prep.) and *Phyllanthus reticulata* (Allen 1908, Ali 1942). Although the majority of insects are taken from vegetation, the species takes invertebrates from the ground and hunts them in shallow caves enclosed by boulders (Subramanya *et al.* in prep.). Flycatching from vegetation is the most frequently adopted method (Subramanya *et al.* in prep.). Stomachs were full of drupes of “*Phyllanthus reticulatus*?” and “*Santalum album*” on which they were largely observed feeding (Ali and Whistler 1942–1943). Of 33 food items recorded, 53% were insects and the rest fruit, and in all cases the insect prey was less than 1 cm long, apart from a 3 cm caterpillar (Subramanya and Prasad 1996). Fruit seen taken on Horsely hill was *Solanum indicum* (61%), *Ficus benghalensis* (22%), *Santalum* (11%) and *Ziziphus* (6%) (Subramanya and Prasad 1996). Food brought to nestlings consisted of insects (mostly caterpillars, winged adult termites and dragonflies) and berries (mainly of the genera *Erythroxylon* and *Scutia*, plants that grew in abundance in the vicinity of the nest) (Venkataswamappa and Chaitra 1999). Birds sometimes join mixed-species flocks (Subramanya and Prasad 1996).

Breeding Very little is known about the breeding habits of this species. Breeding has been reported in May–July (Allen 1908), although nest-building and courtship have been recorded in March, with birds stripping dry bark from trees or bushes such as *Lantana* presumably as lining or camouflage for nests (Karthikeyan 1995, Pittie 1998). Allen (1908) reported an otherwise very ordinary bulbul-type nest anomalously placed “on the ground amongst dead leaves and between two over-arching granite boulders”; another was placed in a “dwarf date palm (*Phoenix humilis*)”. A footnote to Allen (1908; also Baker 1922–1930), however, described a “shallow nest of very coarse twigs—bound together with cobwebs and lined [with] fine fibres—the whole a heavy, clumsy, structure quite unlike an ordinary Bulbul’s nest”. One nest contained three eggs on 15 May (Allen 1908) and another two “much-incubated” eggs on 23 June (footnote to Allen 1908). More recently a nest was found in Channapatna taluk, Karnataka, built close to the ground in the fork of a sparsely leaved bush, next to a large boulder and sheltered by overhanging foliage; it was an untidy construction of loosely placed twigs and pieces of hay, bound together by cobwebs and lined with fine fibres (Venkataswamappa and Chaitra 1999). Nest-building was complete in eight days, after which two eggs were laid; incubation lasted 20 days and was performed by only one bird, presumably the female; chicks fledged after 13 days (Venkataswamappa and Chaitra 1999). Further nests built in 2000 were made by the female alone (one completed in three days), close to the ground in bushes, and contained two eggs; fledging occurred after 13 days (Chaitra *et al.* 2000).

THREATS Loss of suitable habitat may be affecting the species. Removal or cutting of vegetation for fuel by people from villages occurs around its habitats, as does quarrying of the hills for granite on a commercial scale; forest fires and cattle-grazing within the habitats have recently been observed (Subramanya *et al.* in prep.). Livestock, especially goats, from surrounding villages browse on the shrubs like *Securinega leucopyrus* and *Phyllanthus reticulata* which are the important food-yielding plants for the species. During a recent survey, the species was not recorded at six historical localities: in two the hills were totally denuded, while large-scale quarrying for granite had destroyed a greater portion of the habitat at three (Subramanya *et al.* in prep.). Intense browsing of vegetation has wiped out the scrub vegetation almost totally in the hills adjacent to Bananthimari (Subramanya *et al.* in prep.). The Shevaroy hills are almost entirely covered with coffee plantations, the bulbul surviving only at the edges where cultivation stops at escarpments (Karthikeyan 1995). Although Ali (1942) had collected specimens on Thondebhavi in 1938 the hill was totally denuded in the 1990s with no sign of the species (Subramanya *et al.* 1990). Habitat on Horsely hill is currently “much disturbed”, cleared and overgrazed (Subramanya and Prasad 1992).

MEASURES TAKEN The species is included on Schedule IV of the Wildlife Act (1972) under a generic term (“bulbuls”). It has apparently occurred in the Indira Gandhi (Anaimalai) Wildlife Sanctuary (841.5 km²) (although it is only a straggler here at best), Mudumalai Wildlife Sanctuary (218 km²) and Sri Venkateshwara Wildlife Sanctuary (154 km²). There is also a wildlife sanctuary in the Biligirirangan hills, and the Mathunga hills locality falls within the Humpi Ruins World Heritage Site (SS). Adichunchanagiri is part of a “peacock sanctuary” and also protected for religious reasons (SS). Finally, and least effectively, habitat at various sites (such as Devarayanadurga State Forest, Gingi hills, Horsely hills, Ragihalli State Forest, Shevaroy's and Tirumala hills) falls within nominally protected forest areas, although these are generally subject to high encroachment and disturbance (SS).

MEASURES PROPOSED Efforts to conserve and manage the species in future should be directed towards protecting suitable habitats. Beyond ensuring adequate protection and management of reserves in which the species already occurs, there is an urgent need to identify one or more large areas of hill ranges (comprising clusters of hills), or entire smaller hill ranges, for protection and conservation of the species. The areas identified should be given maximum protection from all threats and disturbance. Localities identified for protection should be scattered across the range of the species to encompass different subpopulations and types of habitats.

REMARKS (1) According to Whistler and Kinnear (1931–1937), Horsely hill (not “Horsley hill”: *contra* Subramanya and Prasad [1996]) is possibly the site in “the Eastern Ghats west of Nellore” where the type specimen was taken (Jerdon 1862–1864). However, given the fact that Nellore is some way north of Horsely hill, it seems best to treat the two records as coming from different areas, with Jerdon’s bird more likely to have been shot in the Veliconda range more or less directly inland from Nellore (as were his Jerdon’s Coursers *Rhinoptilus bitorquatus*; see relevant account). (2) Mention of the species from Madras (Chennai) (Oates 1889–1890) is apparently not correct, or at least refers to the area very generally (Dewar 1905).