Threatened Birds of Asia:

The BirdLife International Red Data Book

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KASHMIR FLYCATCHER

Ficedula subrubra

Critical □ —
Endangered □ —
Vulnerable ■ B1+2a,b,c,d,e; C1



This migratory flycatcher has a small, declining population and breeding range, which is also severely fragmented, as a result of the destruction of temperate, mixed deciduous forests. It therefore qualifies as Vulnerable.

DISTRIBUTION The Kashmir Flycatcher (see Remarks 1) has a very restricted distribution in northern India and a small portion of Pakistan, occurring as a summer breeding visitor to side valleys of Kashmir and in the Pir Panjal range (Bates and Lowther 1952, Henry 1955, Roberts 1991–1992). Virtually the entire population winters in Sri Lanka with small numbers recently discovered wintering in the Nilgiri hills of southern India, being recorded sparingly in Nepal, Bhutan and across much of India on migration. Although Baker (1922–1930) gave its distribution as extending from the Afghan boundary and Gilgit, there are no specimens or records from these places (Roberts 1991–1992), nor does it breed around Simla in Himachal Pradesh, or Garhwal in Uttar Pradesh, India, as he claimed.

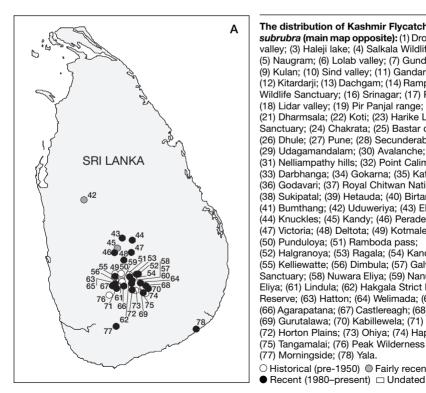
- *PAKISTAN* It is a scarce and apparently irregular summer visitor to the mountains of northern Pakistan, with one record of a passage migrant in Sind (see Remarks 2). Records are from: *North-West Frontier Province* **Drosh**, southern Chitral, a pair breeding, summer 1903 (Perreau 1910); **Kaghan valley**, one, June 1990 (Dissing *et al.* 1991); *Sind* **Haleji lake**, Thatta district, c.60 m, one male, March 1988 (Hirschfeld *et al.* 1988). *Kashmir* ("Azad Kashmir"; currently under the administration of Pakistan) **Salkala Wildlife Sanctuary**, Neelum (Kishenganga) valley side of Kazinag range, 2,100 m, a pair feeding young, June 1983 (Roberts 1991–1992); Naugram, 1–2, June 1940 (Bates 1942).
- *INDIA* The breeding population is all but confined to Jammu and Kashmir. Non-breeding individuals are encountered on passage, and a small population winters in the Nilgiri hills (Harrap and Redman 1990, Karthikeyan and Athreya 1993; see Remarks 3). Records are from:
- Jammu and Kashmir unspecified localities, July 1874 (female in BMNH), May 1871 (two males in BMNH), pre-1897 (male and female in BMNH), and "Vale of Kashmir" (Kashmir valley), 1,850 m, August 1891 and April 1892 (specimen in USNM, Richmond 1895); Lolab valley, south of Lalpur, July 1891 (two specimens in USNM, Richmond 1895), 2,050 m, May 1893 (specimen in USNM, Richmond 1895), 2,150 m, May 1894 (Richmond 1895), also above Olus, on the range between Wular lake and Lolab, 2,050 m, April 1928 (male in BMNH); Gund, nesting, May 1869 (four specimens in BMNH), May-June 1896 (Davidson 1898b); Kangan, four, May 1983 (P. Alström, U. Olsson and D. Zetterström in litt. 2000); Kulan, May-June 1896 (Davidson 1898b); Sind valley, c.2,400 m, April 1923 (male in BMNH), breeding, 1922–1925 (Osmaston 1927); Gandarbal, 1,800 m, May 1928 (male in BMNH); Kitardarji (Kiterdarji), Jhelum vallev side of Kazinag range, common, June 1940 (male and female in BMNH, Bates 1942, Bates and Lowther 1952); Dachgam (Dachigam), 1,900–2,050 m, April 1904 (male in BMNH), August-September 1969 (Gauntlett 1972), several, April-May 1983 (P. Alström, U. Olsson and D. Zetterström in litt. 2000), male, July 1984 (Buck 1984), 15 ringed, April-July 1989 (BNHS ringing data); Rampur-Rajpur valley, above Wular lake, "many pairs" undated (Bates and Lowther 1952), in addition, a specimen labelled "Tha Wooffa" and "The Woofa" (or perhaps Woola) probably comes from the vicinity of Wular



lake, April 1892 (specimen in USNM); **Overa Wildlife Sanctuary**, Anantnag, 19 mist-netted, May–July, 1985–1987 (Jamdar 1987, Price and Jamdar 1990); **Srinagar**, 1,700 m, April–May 1920 (eight specimens in BMNH), 1,800 m, September 1925 (three males in BMNH); **Pahalgam**, singles daily, April–May 1983 (P. Alström, U. Olsson and D. Zetterström *in litt*. 2000), male, August 1983 (Waller 1983); **Lidar valley**, 2,450–2,550 m, breeding, June 1924 (male and female in BMNH), 1922–1925 (Osmaston 1927), also a pair and 3–4 juveniles seen near Aru, July 1989 (P. Schiermacker-Hansen *in litt*. 1999); north slope of **Pir Panjal range**, 2,150 m, August 1891 (specimen in USNM, Richmond 1895); Takht, here presumed to be **Takh**, August–September 1969 (Gauntlett 1972); Gaewan (untraced), June 1925 (Osmaston 1926) and Phudee (or Phadee) (untraced), May 1874 (male in BMNH);

- *Himachal Pradesh* **Dharmsala**, 1,400 m, September 1923 (Whistler 1926a, specimen in BMNH); **Koti** (Koti state), May 1920 (female in BNHS);
- *Punjab* in or near **Harike Lake Wildlife Sanctuary**, one male, September 1998 (Robson 1999);
 - Uttar Pradesh Chakrata, Dehra Dun district, June 1912 (male in BMNH);
- *Madhya Pradesh* Toinar, **Bastar district**, one female, January 1979, supposedly "obviously a bird on passage", but the date seems unusually early (Majumdar 1984);

- Maharashtra Dhule (Dhulia), Jalgaon district, October 1885 (male in BMNH); Pune (Poona), one record, undated (Baker 1922–1930), possibly in reference to the specimen from Dhule:
- Andhra Pradesh Secunderabad, two males, September 1917 (Currie 1919), this presumably the Hyderabad record mentioned by Baker (1922–1930):
- Tamil Nadu Udagamandalam (= Ootacamund, Ooty), February 1984, February 1985 and December 1986 (Oriental Bird Club Bull. 2 [1985]: 36-40, Harrap and Redman 1990), at nearby Cairnhill Reserve Forest, February 1988 (P. J. Hines in litt. 1999), at Udagamandalam in December 1990 (Karthikeyan and Athreya 1993), one male near Muthorai, January 1994, and three there in January 1995 (Holt 1995), one male, November 1994 (B. Gee in litt. 1999). Avalanche road, one male, December 1997 (H. Hendriks in litt, 1999); Mullikorai, near Avalanche, one male, November or December 1994 (Gee 1995); Nelliampathy hills, undated (Baker 1922–1930); Point Calimere, one male, October 1969 (Jamdar 1987), one, January 1981, one, November 1987 (BNHS ringing data);
 - Bihar Darbhanga, one male, April 1906 (Inglis 1906).
- **NEPAL** The species is a scarce passage migrant, reported mainly from central and eastern Nepal from Chitwan to Jhapa district, although it probably occurs more regularly in western Nepal given its breeding range in neighbouring Jammu and Kashmir (see Remarks 4). Records are from: Gokarna, Kathmandu valley, 1,400 m, one, April 1982 (Nordin and Wallander 1982); Kathmandu, one, April 1953 (Proud 1955) and at Pashupatinath, Kathmandu, 1,340 m, one, April 1982 (Eames 1982, Farrow 1982); Godavari, Kathmandu valley, 1,500 m, one, October 1970 (Inskipp 1971), two, February 1980 (Malling 1981); Royal Chitwan National



The distribution of Kashmir Flycatcher Ficedula subrubra (main map opposite): (1) Drosh; (2) Kaghan valley; (3) Haleji lake; (4) Salkala Wildlife Sanctuary; (5) Naugram; (6) Lolab valley; (7) Gund; (8) Kangan; (9) Kulan; (10) Sind valley; (11) Gandarbal; (12) Kitardarji; (13) Dachgam; (14) Rampur; (15) Overa Wildlife Sanctuary; (16) Srinagar; (17) Pahalgam; (18) Lidar valley; (19) Pir Panjal range; (20) Takh; (21) Dharmsala; (22) Koti; (23) Harike Lake Wildlife Sanctuary; (24) Chakrata; (25) Bastar district; (26) Dhule; (27) Pune; (28) Secunderabad; (29) Udagamandalam; (30) Avalanche; (31) Nelliampathy hills; (32) Point Calimere; (33) Darbhanga; (34) Gokarna; (35) Kathmandu; (36) Godavari; (37) Royal Chitwan National Park; (38) Sukipatal; (39) Hetauda; (40) Birtamod; (41) Bumthang; (42) Uduweriya; (43) Elkaduwa; (44) Knuckles; (45) Kandy; (46) Peradeniya; (47) Victoria; (48) Deltota; (49) Kotmale; (50) Punduloya; (51) Ramboda pass; (52) Halgranoya; (53) Ragala; (54) Kandapola; (55) Kelliewatte; (56) Dimbula; (57) Galways Land Sanctuary; (58) Nuwara Eliya; (59) Nanuoya; (60) Sita Eliya; (61) Lindula; (62) Hakgala Strict Natural Reserve; (63) Hatton; (64) Welimada; (65) Dickoya; (66) Agarapatana; (67) Castlereagh; (68) Mirahawatta; (69) Gurutalawa; (70) Kabillewela; (71) Norwood; (72) Horton Plains; (73) Ohiya; (74) Haputale; (75) Tangamalai; (76) Peak Wilderness Sanctuary; (77) Morningside; (78) Yala. O Historical (pre-1950) Fairly recent (1950–1979)

Park, at Sauraha, one, April 1985 (Harrap 1985), three, April 1986 (Holt *et al.* 1986); Sukipatal, upper Arun valley, 2,150 m, one, November 1973 (Inskipp and Inskipp 1981b); Hetauda, c.350 m, one, March 1982 (Turton and Speight 1982); between Birtamod (Birtamore) and Ilam, one, March 1982 (Walinder and Sandgren 1983); Swayambhunath (untraced), Kathmandu valley, 1,400 m, one, December 1964 (Nepali 1986).

■ BHUTAN There is only one confirmed record: Bumthang, male, October 1973 (specimen in BNHS, Abdulali 1968–1996).

SRI LANKA The species is a winter visitor to montane forests of the hill zone of central Sri Lanka (Whistler 1944, Phillips 1978, Banks and Banks 1980), a distribution roughly equating to "Horton Plains, the whole of the main range, the Haputale and other Uva ranges. the upper parts of Peak forest, and all the surrounding coffee districts" (Legge 1880). Records are as follows: Uduweriya, 1973 (Ceylon Bird Club News 1973); Elkaduwa, April 1991 (Ceylon Bird Club News April 1991); Corbett's Gap, Knuckles range, 1,200 m, February 1996 (Ceylon Bird Club News February 1996); Kandy, 1973 (Ceylon Bird Club News 1973); Peradeniya, 1979 (Cevlon Bird Club News 1979), at Kirkoswald estate, Hanthana, near Peradeniva, 1993 (Makuloluwa et al. 1997); Victoria park, one, January 1995 (R. Skeen in litt. 1999); Deltota, 1980 (Ceylon Bird Club News 1980); Kotmale, undated (Legge 1880); Punduloya (Pundooloya), c.1886 (Whistler 1944); Ramboda pass (Rambodde pass), "common", 1876–1877 (Legge 1880, male in BMNH), 1,000 m, February 1881 (juvenile male and female in AMNH); Halgranoya, July 1997 (Ceylon Bird Club News July-August 1997), January 1980 (Ceylon Bird Club News January 1880); Ragala, October 1995 (Cevlon Bird Club News October 1995); Kandapola (Kandopolla) plains, January 1877 (male and two females in BMNH): Kelliewatte, Patana. 1,000 m, February 1997 (Cevlon Bird Club News February 1997); Dimbula (Dimboola), November 1871 (female in BMNH); Galways Land Sanctuary, undated (Cevlon Bird Club News 1981); Nuwara Eliya, 1870 (Holdsworth 1872), many records until at least 1997 (Ceylon Bird Club News February 1997), including at the "Railway gorge", January 1877 (female in BMNH) and January 1973 (Ceylon Bird Club News January 1973), and at Sooriyagahapatana, March 1998 (K. Weerakoon in litt. 2000): Nanuova, undated (Cevlon Bird Club News January 1973); Sita Eliya, male, March 1997 (Ceylon Bird Club News March 1997); Lindula, January 1876 (male in BMNH); Hakgala Strict Nature Reserve (and Hakgala), 1981 (Ceylon Bird Club News January 1981), many records until at least December 1990 (Ceylon Bird Club News December 1990), one in the Botanical Gardens, January 1995 (R. Skeen in litt. 1999), one, 1991-1996 (IUCN/WCMC/FAO 1997), 1995 (Ranawana and Bambaradeniya 1998); Hatton, pair, November 1985 (Ceylon Bird Club News November 1985), March 1990 (Ceylon Bird Club News March 1990); Welimada, 1979 (Ceylon Bird Club News 1979), 1982 (Ceylon Bird Club News 1982), 1992 (Ceylon Bird Club News 1992); Dickoya, 1,100 m, 1979 (Ceylon Bird Club News 1979), many records in Ceylon Bird Club News until at least 1991 (Ceylon Bird Club News March 1991); Agarapatana (Agrapatna), October 1985 (Cevlon Bird Club News October 1985), one, September 1987 (Ceylon Bird Club News September 1987); Castlereagh, April 1988 (Ceylon Bird Club News April 1988); Mirahawatta, Uva ranges, 1,200 m, male, March 1987 (Ceylon Bird Club News March 1987); Gurutalawa, undated (Ceylon Bird Club News January 1981); Kabillewela (Kabillewela South), undated (Ceylon Bird Club News 1984), male, February 1986 (Ceylon Bird Club News February 1986); Norwood, pair, September 1996 (Ceylon Bird Club News September 1996); Horton Plains, 1877 (one specimen in BMNH), many records until at least 1997 (Ceylon Bird Club News November 1997); Ohiya, 1,750 m, six collected, November–December 1936 (Whistler 1944, male and female in BMNH); Haputale, Uva ranges, undated (Legge 1880); Tangamalai, one, 1991–1996 (IUCN/WCMC/ FAO 1997); Peak Forest, now in Peak Wilderness Sanctuary, undated (Legge 1880); Morningside (Sooriyakanda), female, March 1998 (Ceylon Bird Club News March 1998), March 2000 (K. Weerakoon in litt. 2000); Yala (presumably within or near Ruhuna National

Park), two reported (although it is considered unlikely that it could occur at this site: S. W. Kotagama *per* K. Weerakoon *in litt*. 2000), December 1997 (Green *et al*. 1997).

POPULATION There is little recent information on the population of this species from the breeding grounds (see Distribution), but there appears to be some evidence that it may have declined in its non-breeding range in Sri Lanka (see below). Given its restricted breeding and non-breeding ranges, and the reduction in the area of its forest habitat, it is unlikely that it currently numbers more than a few thousand individuals.

Pakistan The species appears to occur rarely and erratically as a migrant and breeding visitor, although it possibly breeds more or less regularly in the Neelum (Kishenganga) valley which forms part of the watershed of the Kazinag range in which the species is locally common on the Indian side (e.g. Kitardarji) (Roberts 1991–1992).

India In Kashmir, it was thought to breed "sparingly" by Brooks (in Hume and Oates 1889–1890) but later judged "fairly common" (Bates and Lowther 1952). Bates and Lowther (1952) found it "common" at Kitardarji in the Kazinag range, although it was scarce in most other valleys of the area and it still appears to be locally fairly common in side valleys of the main Kashmir valley during summer; it is, for example, a "common breeder" in the Overa Wildlife Sanctuary (Jamdar 1987). Although no population data are available for Jammu and Kashmir the species nevertheless appears to have declined (Collar *et al.* 1994). Further south it is a vagrant on passage in all other regions of India except the Nilgiris, where a small wintering population is perhaps established (Harrap and Redman 1990, Karthikeyan and Athreya 1993).

Sri Lanka In the late nineteenth century it was considered to be "every season more or less common" in Central Province, but its distribution was "somewhat irregular", being "plentiful during one season in certain places", while "in the following year, it may be totally absent" (Legge 1880). This variable winter distribution presumably explains why it appears to be "considerably more common" in some years than others (Phillips 1944). It arrived with the north-east monsoon in autumn, "rapidly spreading over the hill-districts" of Sabaragamuwa province, becoming "suddenly plentiful" and, in places, an "abundant visitor" (Lewis 1898). More recently, it was described as "plentiful, in small numbers, in gardens and wooded areas throughout the hills" (Phillips 1978) and "common" (Kotagama and Fernando 1994, Wijesinghe 1994), although D. Raheem (in litt. 1999) considered it a "rather rare migrant". During a major survey of over 200 forest sites in Sri Lanka in 1991–1996, this species was recorded in only two forests (IUCN/WCMC/FAO 1997), possibly indicating a decline but perhaps because many forests were surveyed at times of year when this species was not present.

ECOLOGY *Habitat* In the Himalayas it breeds at middle altitudes (1,800–2,300 m) in light mixed forests with plenty of scrub and where tree cover is predominantly deciduous (Bates and Lowther 1952, Roberts 1991–1992). It is most numerous around 2,000 m in Jammu and Kashmir, tending not to nest in the main valley, but up smaller wooded side valleys such as those formed by the Sind and Lidar (Osmaston 1927, Bates and Lowther 1952). It has been observed breeding in an orchard (Perreau 1910), but it generally frequents temperate mixed forest of hazel (*Corylus*), walnut, cherry (*Prunus*), willow (*Salix*), etc., especially where there is a dense growth of "Perrottia" (presumably *Perrottetia*) (Osmaston 1927, Ali and Ripley 1968–1998), and here it "haunts the lower and middle foliage", only rarely and briefly perching on the ground or visiting the upper canopy (Bates and Lowther 1952). Specimens on spring migration around Srinagar have been recorded in almond orchards and willow groves (BMNH label data). All Nepal records have been from open broadleaved forests with mature trees and disturbed or destroyed understorey (Inskipp and Inskipp 1991, H. S. Baral *in litt*. 1998).

On the wintering grounds it apparently prefers disturbed habitats including forest edge, "trees at the sides of paths cut in the jungle" (Legge 1880) and gardens (Holt 1995), where it establishes a winter territory (Henry 1955). In the past on Sri Lanka, it was reported to be

found commonly down to 600 m (Lewis 1898), although Legge (1880) stated that it was seldom found below 760 m. Recent observers have described it as most common above 900 m (Phillips 1978), or even 1,200 m (D. Raheem *in litt*. 1999).

Food The species is insectivorous (Henry 1955), mainly taking flying insects close to ground level and seldom perching more than 6 m up while foraging (Bates and Lowther 1952, Roberts 1991–1992). Insect remains have been found in the gizzards of specimens (BMNH label data). Unlike most flycatchers, it apparently spends a certain amount of time on the ground, hopping about in search of insects (Henry 1955, Banks and Banks 1980).

Breeding In the breeding season this species is territorial and monogamous (Bates and Lowther 1952). Eggs are usually laid in the latter half of May or throughout June (Bates and Lowther 1952) while most nests containing young have been found in June in both India (Osmaston 1927) and Pakistan (Roberts 1991–1992). The nests themselves are invariably placed in a cavity or crevice in the trunk of a (usually small) tree (Roberts 1991–1992). They have been recorded nesting most commonly in "perrottias" (presumably Perrotettia), but also willows (Osmaston 1926). Natural hollows or old woodpecker nest holes at around shoulder height appear to be favoured, especially those with entrance holes or slits of small size, often leading vertically downwards (Bates 1942, Bates and Lowther 1952). Of nine nests found by Davidson (1898b), two were within 2 m of the ground, three were 3-5 m up and the rest were 6-12 m up. Osmaston (1927) recorded nests 2-7 m above the ground. Inside the cavity, the nest itself is an untidy cup made of dried leaves, grasses and moss, lined with some hairs, bark shavings and a few feathers (Davidson 1898b, Osmaston 1927, Bates and Lowther 1952, Roberts 1991–1992). The clutch is usually either four or five eggs (Osmaston 1927), most often five (Davidson 1898b), although occasionally only three are laid (Bates and Lowther 1952, Roberts 1991–1992). Most of the nest-building and incubation is apparently done by the female alone (Roberts 1991–1992).

Migration There was initially some confusion over the whereabouts of this species in the non-breeding season. As ornithologists failed to find it in winter in peninsular India, they either assumed that it must be resident (Brooks 1877) or postulated that it lost the diagnostic features of its plumage at that time and thus merely escaped detection (Hume and Oates 1889-1890). However, its absence from India in winter is because practically the entire population migrates from the Himalayas to Sri Lanka for the non-breeding season. Individuals generally leave the breeding grounds in September (Bates and Lowther 1952), passing through the Kashmir valley in this month (Osmaston 1927). The species usually reaches the highlands of Sri Lanka in October, and leaves again towards the end of March (Legge 1880, Whistler 1944, Henry 1955). The lack of intervening records between Sri Lanka and the Himalayas led Legge (1880) to conclude that it made this journey in a single rapid flight without making landfall. As a corollary, Lewis (1898) later remarked that, with its breeding and wintering ranges at high altitudes and thousands of miles of lowlands in between, it must migrate at high altitude. However, it is perhaps unlikely to undertake the journey in one stage. Five years after Legge's (1880) statement a migrant was collected at Dhule, Maharashtra, and during the twentieth century the species was being identified with increasing frequency on migration (see Distribution), presumably owing to improved observer coverage and skill. In spring, they have been recorded on return passage in the Jhelum and Kishenganga valleys in April and early May (Bates and Lowther 1952). It has been noted in Nepal mostly on spring passage as a scarce migrant, although a few records are from autumn and one from midwinter (see Distribution). A male recorded by Hirschfeld et al. (1988) near Haleji lake, Sind, in March was an unusually early migrant.

THREATS The Kashmir Flycatcher is one of four threatened members of the suite of 11 bird species that are entirely restricted to the "Western Himalayas Endemic Bird Area", threats and conservation measures in which are profiled by Stattersfield *et al.* (1998).

Habitat loss India The major threat to the species lies in the continuing destruction and degradation of forests in the valleys of Kashmir (Collar et al. 1994); the frequent felling and lopping of trees like hazel or walnut, along with understorey clearance, is contributing to this threat (R. Kalsi in litt, 2001). Sri Lanka The main threat to this species on its wintering grounds is again probably the clearance and degradation of forest. However, its apparent preference for disturbed and edge habitats during this season (see Ecology) presumably means that it may not be as seriously affected as some of the Sri Lankan endemic bird species which require undisturbed forest. Natural closed-canopy forests on the island were reduced in extent from 29,000 km² (44% of the land area) in 1956 to 16,590 km² (27%) in 1980, and to an estimated 12,260 km² (19%) by 1983, of which only 1,440 km² was rainforest (Collins et al. 1991). However, another study estimated that a total of 15,828 km² (23.9% of the land area) of closed-canopy natural forest remained in 1992, including a total of 719 km² of the montane and submontane forests that this species inhabits (Legg and Jewell 1995). The main causes of the loss and degradation of natural forest on Sri Lanka have been logging, fuelwood gathering (mainly for domestic use but also for the brickmaking industry), clearance of forest for permanent agriculture, replacement of natural forests by tree plantations, mining for gem stones, urbanisation and fire (Collins et al. 1991). Another concern is that forest die-back in the montane region is affecting the habitat of this species (Kotagama 1994). Preliminary and sporadic studies indicate that air pollution, causing acid clouds, rain and mist, mainly during the south-west monsoon, could be responsible (Hoffmann 1997). For the most part, the law protecting the remaining wet zone forests is quite effective (IUCN/WCMC/FAO 1997), but encroachment of human populations into forest patches continues to threaten the integrity of many forest sites and increase habitat fragmentation (NEAP 1998–2001). A high proportion of the remaining forests are now included in national parks and sanctuaries, but many of these areas have been reported to be generally neglected and unprotected, and some important bird sanctuaries have suffered severe degradation (Hoffmann 1996).

MEASURES TAKEN *Legislation* In India the flycatchers "Muscicapidae" are included, along with most Indian species, in Schedule IV of the Wildlife Act 1972, while in Sri Lanka the 1993 amendment of the Fauna and Flora Protection Ordinance of 1938 (Act No. 49) grants protection to all Sri Lankan birds (apart from agricultural pests), and it is therefore illegal to kill this species or to keep it in captivity there.

Protected areas and habitat conservation In India the species breeds commonly in Overa Wildlife Sanctuary (32 km²), Jammu and Kashmir (Jamdar 1987), although it is not known what level of protection this confers. In Sri Lanka all wet zone forests, including the hill forests where this species overwinters, are protected from logging by a moratorium passed in 1990 (NEAP 1998–2001). It has also been recorded in Galways Land Sanctuary, Hakgala Strict Nature Reserve (11 km²) and Peak Wilderness Sanctuary (224 km²), while there is apparently an anomalous record from Ruhuna National Park.

Research A major survey of over 200 forest sites in Sri Lanka in 1991–1996 defined a national system of conservation forests that fully represents forest biodiversity (and protects watersheds and meets cultural, economic and social needs) (IUCN/WCMC/FAO 1997).

MEASURES PROPOSED Conservation action in Jammu and Kashmir should focus on the protection of large tracts of native forest in the valleys where this species breeds. The provision of suitable nestboxes in these woodlands is likely to boost the breeding population and this option should be pursued wherever appropriate.

Sri Lanka has an extensive system of protected areas covering over 14% of total land area, but this system is least extensive in the wet zone, and therefore does not cover up to 15% of the species diversity of the island (IUCN/WCMC/FAO 1997). An optimum system of conservation forests (reserved for biodiversity conservation and research) covering 7.8%

of total land area has been proposed, including virtually all remaining forests in the wet zone (IUCN/WCMC/FAO 1997). In addition it has been recommended that the current ban on the logging of wet-zone forests should be maintained for the foreseeable future (IUCN/WCMC/FAO 1997). The National Environmental Action Plan (NEAP 1998–2001) makes recommendations for managing forests well into the new millennium. These include the provision of seed and subsidies to landowners to encourage them to plant local timber, fruit and medicinal plants (to reduce unauthorised commercial exploitation of forests), promoting programmes to create awareness of the destruction of biological resources, and improving the enforcement capabilities of the forest department.

This species, given its unique position as a threatened animal whose breeding population is virtually endemic to India and whose wintering population is almost entirely confined to Sri Lanka, offers an opportunity for strengthening the links between these two countries, both in terms of cooperative conservation endeavours and as political neighbours.

REMARKS (1) There was initially a great deal of uncertainty regarding the taxonomic position of the Kashmir Flycatcher. It was usually lumped with Red-breasted Flycatcher Ficedula parva, at that time including the Red-throated Flycatcher F. albicilla, until it was judged "evidently a separate species" on the basis of plumage characteristics, moult sequences and wing formula (Whistler and Kinnear 1931–1937), and its sympatric breeding range (Osmaston 1930a), although the latter statement is probably made in error (see Grimmett et al. 1998). Despite its obvious similarity to the Ficedula parva group, the closest relative of the Kashmir Flycatcher might in fact be the Rufous-gorgeted Flycatcher F. strophiata (Whistler and Kinnear 1931–1937). In early literature the species masqueraded as Erythrosterna hyperythra or Siphia hyperythra, the Indian Red-breasted Flycatcher. Unfortunately, the specific name hyperythra also applies to another montane (but widespread) species, the Snowy-browed (or previously Rufous-breasted Blue) Flycatcher Ficedula hyperythra. Because of these nomenclatural problems it is sometimes difficult to detect early references to the species. (2) The concentration of records in eastern Nepal with a corresponding paucity of sightings in the west is likely to reflect observer coverage rather than any true frequency of occurrence (H. S. Baral in litt. 1998). (3) An immature male reportedly collected at Bharwana, Kangra district, Himachal Pradesh, in February 1923 (Whistler 1926a), was later considered a misidentification (Whistler and Kinnear 1931-1937). The species has also apparently occurred at an unspecified locality in "Travancore" (mostly Kerala), undated (Baker 1922-1930). (4) Although Murray (1887) recorded Siphia parva hyperythra (=Ficedula subrubra) as common in Quetta and Chaman, Pakistan, during spring migration, Ticehurst (1926) pointed out that this was presumably a mistake, and the birds involved likely to have been typical Ficedula parva parva.