The ornithological importance of Thrumshingla National Park, Bhutan

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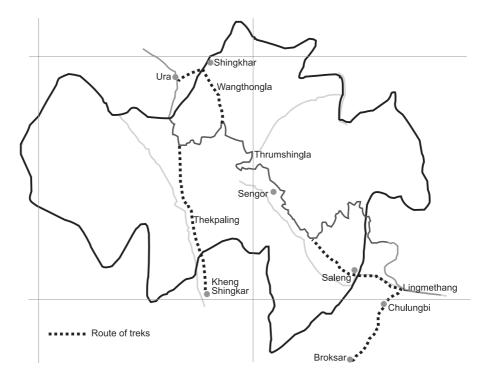
Thrumshingla National Park is one of four national parks in Bhutan and was gazetted in 1998 to ensure the conservation of biodiversity in the central belt of the country. Two bird surveys have been carried out in the park: in April and May 1998 and in January 2000. Based on these surveys and records from other sources, a list of 345 bird species has been compiled for the park up to the end of May 2000. This includes three globally threatened species, 15 of Bhutan's near-threatened species and eight of the country's 11 restricted range species. Warm broadleaved forest was found to be the most valuable for bird species in both the breeding season and in winter, followed by cool broadleaved forest. Fir and hemlock, especially those with an understorey of rhododendron and bamboo, were the richest forests for birds at higher altitudes.

INTRODUCTION

Bhutan lies in the eastern Himalayas, one of the world's biodiversity 'hotspots' and identified as an Endemic Bird Area by BirdLife International (Stattersfield et al. 1998). The country has an extensive protected area system, encompassing 26% of its land area and covering the full range of the nation's major ecosystem types. Thrumshingla is one of four national parks in Bhutan and was proposed in 1993 to ensure the conservation of biodiversity in the central belt of the country (Anon. 1998). The park was officially gazetted in July 1998 when a park manager and other staff were appointed and became functional with the support of the WWF Bhutan Programme. Thrumshingla lies in east-central Bhutan (see Map) partly in the dzongkhags/districts of Bumthang, Lhuntse and Mongar. The park's core area is 768 km² and is surrounded by a buffer zone. The area around the small village of Sengor, near the middle of the park, is a multi-use zone. Bhutan's main east-west

highway runs through approximately the middle of the park from Bumthang, via Ura, Sengor, Namling, Yongkhala to Lingmethang. The park's altitudinal range extends from 1,400 m below Saleng in the core area and 700 m at Lingmethang in the buffer zone to over 6,000 m at Thrumshingla Peak.

Like most of Bhutan, Thrumshingla National Park is largely covered in forests, which are of high quality and relatively unexploited, compared to forests elsewhere in the Himalayas. In the subtropical zone, the main forest types are warm broadleaved forest, which grows on moist slopes, and chir pine *Pinus roxburghii*, which forms open dry forests on dry slopes and in dry valleys. Cool broadleaved forest grows above the warm broadleaved forest and is replaced by oak *Quercus* on less moist slopes, and by Blue Pine *P. wallichiana* in dry areas. Other coniferous forests that are widespread at higher altitudes in the park up to the tree-line are hemlock *Tsuga dumosa* and fir *Abies spectabilis*, which grow on moist slopes, and spruce *Picea*, which occupies



drier zones. Bamboo is extensive in high-altitude coniferous forests and supports a good population of red panda *Ailurus fulgens*, which has been adopted as the emblem of the park. There are pastures in the alpine zone above the treeline, and in forest clearings in the subalpine and temperate zones. There are a few villages and relatively small associated areas of cultivation in the park, especially in the subtropical zone. In a survey carried out in April 2000, the north-western quadrant of the Park was identified as a core area for tiger *Panthera pardus* (Yonzon 2000).

Up until the end of May, 2000 a total of 345 bird species had been recorded in the park's core area and buffer zone, including 312 species in the core.

METHODS

Two bird surveys have been carried out in the park: in April and May 1998 (Inskipp and Inskipp 1998) and in January 2000 (Inskipp *et al.* 2000). These were organized by the Royal Government of Bhutan Nature Conservation Division and, in 2000, also by the recently appointed park manager and his staff. Hands-on training in bird identification and survey techniques was provided for park staff during both surveys. Locations, habitat types, altitudes and dates were noted for all records, as well as the length of time spent in each habitat type. The overall altitudinal range of all species recorded was extracted from these data. A Global Positioning System was used to determine the co-ordinates of locations en route.

A method of assessing species richness developed by John MacKinnon (MacKinnon and Phillips 1993) was used for each main vegetation type. This measures how rich an area or habitat is for bird species and is a relatively simple and quick method for comparing one area or habitat with another.

Each species encountered is recorded until a list of 20 is reached. Then a new list (number 2) is started and a further 20 species is recorded. Each list must contain 20 different species, but subsequent lists can include species previously listed. However, efforts must be made to exclude the same individual birds from the lists. Then list number 3 is recorded. Ideally lists are repeatedly made until no new species are recorded. A running species total is obtained by extracting the number of species in list 2 that were not in list 1 and so on throughout all the lists recorded for each area or habitat. Species-richness is the species total reached when no new species are recorded. This should be approximately the number of species present in that habitat or area at that time of the year. Some species, because they are very skulking or nocturnal species, will perhaps be overlooked.

Other bird records for the area have been collected by the Royal Government of Bhutan Nature Conservation Division (Pradhan 1997a, 1997b, Sharma 1998). In addition, a significant number of records have been made by several foreign bird tour groups, who have spent a few days in the park in recent years, birdwatching along the road between Ura and Lingmethang. Their visits started in about 1995 and have mainly been in April, but also in January, March and early May.

SIGNIFICANT BIRD RECORDS

A total of 14 species recorded in Bhutan have been identified as globally threatened by BirdLife International (BirdLife International in prep.), and three of these have been found in the park, where they probably breed. Moreover, as many as 15 of Bhutan's 24 near-threatened species have also been recorded in the park. BirdLife International has also identified bird species with restricted ranges, that is with world breeding ranges less than 50,000 km², used to define the Eastern Himalayas Endemic Bird Area (Stattersfield et al. 1998). Eleven restricted-range species have been recorded in Bhutan, and eight of these have been recorded in Thrumshingla and probably breed. Of these eight species one is globally threatened and four are nearthreatened. Here we provide status and natural history notes on this suite of species and one other that does not qualify as a restricted-range species but is, nevertheless, local and rare throughout its range.

CHESTNUT-BREASTED PARTRIDGE Arborophila mandellii Globally threatened, restricted-range species. Rare and local in the park, but probably resident. Found in warm broadleaved forest with bamboo between 1,860 m and 1,980 m between Yongkhala and Namling. Seven were recorded in April 1998 (King 1998), one was heard in April 1998 on 1 May 1998 (Farrow 1998 and Inskipp and Inskipp 1998), three to four were heard on 16-18 April 1999 (Farrow 1999), one was heard in April 1999 (Holt 1999) and four on 23 April 2000 (Farrow 2000a); a pair duetted on 13 and 14 May 2000 (Bishop 2000).

SATYR TRAGOPAN Tragopan satyra Near-threatened species. Uncommon altitudinal migrant within the park. Recorded in January and from March to early May between 1,900 m and 3,850 m in cool broadleaved and fir forests; favours forests with a well-developed bamboo understorey. Up to three were regularly recorded between Yongkhala and Sengor: in March 1994 and April 1995 (Bishop 1999c), January 1995 (King 1995), April 1997 (Farrow 1997, King 1997), April 1998 (Farrow 1998, Inskipp and Inskipp 1998, King 1998), April 1999 (Farrow 1999) and April 2000 (Farrow 2000b). A maximum of seven was heard in fir forests 2 km below Sengor at dawn in May 2000 with three additional birds heard the following morning (Bishop 2000). One to two birds were recorded between Gayzamchu and Thekpaling, between Gayzamchu and Ura, near Ura, and between Thrumshingla and Sengor in April 1998 (Inskipp and Inskipp 1998).

YELLOW-RUMPED HONEYGUIDE Indicator xanthonotus Near-threatened species. Rare and local. Singles were seen between Sengor and Yongkhala, usually near bees' nests, on 14 April 1997 (King 1997), 7 April 1998 (King 1998), 19 April 1998 at 2,200 m (Farrow 1998), 14 April 1999 (Holt 1999) and on 19 April 2000 (Kazmierczak and Fisher 2000). Two were seen on 14 April 1999 at 2,200 m (Farrow 1999). A male was observed in a narrow canyon, persistently attending what appeared to be a nest, in the middle storey of a huge broadleaved tree above a small stream at 2,100 m on 13 May 2000 (Bishop 2000). The nesting habits of this species are unknown. RUFOUS-NECKED HORNBILL Aceros nipalensis Globally threatened species. Fairly common and probably resident. Recorded from January to mid May and in October in warm broadleaved forest with mature trees from 1,005 m to 1,930 m, subject to altitudinal movements. Regularly recorded between Yongkhala and Namling (many observers); also seen around Thekpaling, including six pairs on 1 February 1997, the largest number seen in one area, and between Thekpaling and Kheng Shingkhar (Inskipp and Inskipp 1998), below Saleng in January 2000 (Inskipp et al. 2000), and in the buffer zone around Chulungbi, between Chulungbi and Gulibi, at Broksar and in the Yunari Chu valley in January 2000 (Inskipp et al. 2000). A pair excavated a nest hole and engaged in courtship display between Yongkhala and Namling at 1,900 m on 19 April 1998 (Farrow 1998).

WARD'S TROGON Harpactes wardi Near-threatened, restricted-range species. Rare and local, probably resident; recorded in January and from March to mid May in cool broadleaved forests with vines and hanging creepers between 2,000 m and 2,400 m. One to three birds were regularly recorded below Namling from 2,000 m to 2,200 m: 31 March 1994 (Bishop 1999c), 7 and 8 May 1996 (King 1996), 22 and 23 March 1997 (Redman 1997), April 1997 (Bishop 1999c) 14, 15 and 18 April 1997 (King 1997), 7 April 1998 (King 1998), 11 April 1998 (Bishop 1999c, Holt 1998), 18 April 1998 (Farrow 1998), 13 and 14 April 1999 (Holt 1999), 17 April 1999 (Farrow 1999), 28 January 2000 (Inskipp et al. 2000) and 20-21April 2000 (Farrow 2000a). A group of four was apparently involved in a territorial dispute at 2,200 m in May 2000 (Bishop 2000). Five were seen at 2,300 m on 19 April 1997 (Farrow 1997). Five were also observed near Omdor at 2,210-2,400 m on 8 January 2000 (Inskipp et al. 2000).

BLUE-NAPED PITTA *Pitta nipalensis* Near-threatened species. Rare, probably resident. One was heard in the park below Namling at 1,820 m on 14 April 1999 (Holt 1999) and on 19 April 1998 at 1,800 m (Farrow 1998) and one was seen in the park in November 1999 (Yonzon 2000). One was seen in the buffer zone near Chulungbi at 1,235 m in dense moist herbage in warm broadleaved forest on 17 January 2000 (Inskipp *et al.* 2000) and two were recorded in the buffer zone at 1,050 m on 18 March and 22 April 2000 (Farrow 2000a,b).

LONG-BILLED THRUSH Zoothera monticola Near-threatened species. Rare, status uncertain. Singles were seen near Lingmethang on 16 January 1995 (Dreyer 1995), and between Yongkhala and Sengor on 6 April 1998 (King 1998).

RUFOUS-BREASTED BUSH ROBIN Tarsiger hyperythrus Nearthreatened species. Frequent winter visitor to warm broadleaved and cool broadleaved forests between 990 m and 2,500 m. Six were seen between Lingmethang and Namling on 18 January 1995 and two on the following day (King 1995); two between Yongkhala and Namling on 27 January 2000 and two at Namling on 28 January 2000 (Inskipp *et al.* 2000). One at Gayzamchu in April 2000 (C. Leahey pers. comm. to D. Bishop). In the buffer zone one was seen near Lingmethang on 17 January 1995 (King 1995), one near Chulungbi at 1,130 m on 15 January 2000, four near Broksar at 1,830 m on 20 January, three between Yunidrang and Ngala Pang on 22 January and two between Lingmethang and Saleng in the Shongar Chu valley on 26 January (Inskipp *et al.* 2000).

BLUE-FRONTED ROBIN Cinclidium frontale Nearthreatened species. Rare and local, possibly a summer visitor. Recorded from March to early May in cool broadleaved forests between 1,850 m and 2,400 m. All records are from between Yongkhala and Namling: a male at 1,850 m on 3 March 1994 and a pair seen at almost the same site on 25 April 1997 (Bishop 1999c), two recorded at 2,300 m on 19 April 1997 (Farrow 1997), one male was seen and another heard on 14 April 1998 (Holt 1998), two heard at 2,300 m and 2,500 m on 18 April 1998 (Farrow 1998); four singing on 2 May 1998 from 2,300 m to 2,345 m (Inskipp and Inskipp 1998); two singing males on 14 April 1999 (Holt 1999), three at 2,400 m on 14 April and two at 2,200 m on 17 April 1999 (Farrow 1999), two singing on 19 April 2000 (Kazmierczak and Fisher 2000) and one to two at 2,300 m and 2,400 m on 20 and 21 April (Farrow 2000a).

PURPLE COCHOA *Cochoa purpurea* Near-threatened species. Rare, recorded in April in warm broadleaved and cool broadleaved forests between 1,860 m and 2,220 m. A pair was seen between Yongkhala and Namling at 2,220 m on 26 April 1997 (Bishop 1999c), one was heard above Yongkhala at 1,860 m on 29 April 1998 (Inskipp and Inskipp 1998); one was seen between Yongkhala and Namling in April 1999 (Farrow 1999); one was heard below Namling on 13 April 1999 (Holt 1999), one at 1,900 m on 18 and 19 April 1999 (Farrow 1999) and one on 18 April 2000 (Kazmierczak and Fisher 2000).

BEAUTIFUL NUTHATCH *Sitta formosa* Globally threatened species. Rare and local in warm broadleaved forest, presumably resident. A flock of 21 was seen near Thekpaling at 1,900 m on 29 January 1997 (Pradhan 1997a) and a flock of seven in the same area on 23 April 1997 (Pradhan 1997b).

YELLOW-VENTED WARBLER Phylloscopus cantator Nearthreatened, restricted-range species. Frequent, possibly a summer visitor; recorded from March to early May in warm broadleaved forest between 800 m and 1,840 m. Regularly recorded between Yongkhala and Namling: in April 1995 (Bishop 1995), April 1996 (Bishop 1996, Holt 1996), March 1997 (Redman 1997), April 1997 (Bishop 1997, King 1997), April 1998 (Bishop 1998, Holt 1998, King 1998), April and May 1998 (Inskipp and Inskipp 1998), April 1999 (Holt 1999), May 1999 (Bishop 1999) and April 2000 (Kazmierczak and Fisher 2000). More frequently recorded between Lingmethang and Yongkhala in the buffer zone from March to early May in warm broadleaved forest at lower altitudes between 800 m and 1,840 m (many observers). The highest number recorded in the park was 20 found in the same area on 26 April 1998 (Inskipp and Inskipp 1998); also recorded between Thekpaling and Kheng Shingkhar in April 1998 (Inskipp and Inskipp 1998).

BROAD-BILLED WARBLER Tickellia hodgsoni Restricted range species. Uncommon and local, probably resident, recorded from 1,025 m (January) to 2,500 m (early May) in bamboo in warm broadleaved and cool broadleaved forests. It was seen below Namling from 1,865 m to 2,360 m in April and May: one on 7 May 1996 (King 1996), one on 22 March 1997 (Redman 1997), one on 14 and 15 April 1997 (King 1997), four on 19 April 1997 (Farrow 1997), three on 6 and 7 April 1998 (King 1998), singles on 16 and 17 April 1998 (Farrow 1998), two on 30 April, one on 1 May and two on 2 May 1998 (Inskipp and Inskipp 1998), one on 14 April 1999 (Holt 1999), three on 16 April 1999 (Farrow 1999) and a pair in early May 1999 (Bishop 1999). Several pairs and individuals singing at c. 2,500 m in April 2000 (Bishop 2000) and seven on 20 April 2000 (Farrow 2000a). Also one was seen at Saleng at 1,690 m on 9 January 2000, and one between Saleng and Lingmethang in the Shongar Chu valley in the buffer zone at 1,025 m on 12 January 2000 (Inskipp et al. 2000).

SLENDER-BILLED SCIMITAR BABBLER Xiphirhynchus superciliaris Near-threatened species. Uncommon altitudinal migrant. Recorded in January and from March to mid May between 1,700 m and 2,940 m in warm broadleaved, cool broadleaved, fir and hemlock forests; favours forest with a well developed bamboo understorey. Up to four birds regularly recorded between Sengor and Yongkhala: March 1994 (Bishop 1994), April 1995 (Bishop 1995), April 1996 (Bishop 1996), April 1997 (Bishop 1997, Farrow 1997), April 1998 (Farrow 1998), May 1998 (Inskipp and Inskipp 1998), April 1999 (Farrow 1999, Holt 1999), May 1999 (Bishop 1999) and April 2000 (Farrow 2000). The highest number recorded was three pairs in April 1998 (Bishop 1998). One to two birds were also recorded between Gayzamchu and Thekpaling and between Gayzamchu and Ura in April 1998 (Inskipp and Inskipp 1998), and around Omdor and Saleng in January 2000 (Inskipp et al. 2000).

RUFOUS-THROATED WREN BABBLER Spelaeornis caudatus Near-threatened and restricted-range species. Uncommon and local, probably resident in dense thickets in gullies in cool broadleaved forest, often associated with several very large rocks. Up to four birds were regularly recorded below Namling between March and mid May from 1,800 m to 2,200 m: March 1994 and April 1995 (Bishop 1999c), April 1996 (Bishop 1999c), 18 April 1996 (Holt 1996), 8 May 1996 (King 1996), 22 March 1997 (Redman 1997), April 1997 (Bishop 1997), 19-22 April 1997 (Farrow 1997), 6-8 April 1998 (King 1998), 15 April 1998 (Holt 1998), 18 and 19 April 1998 (Farrow 1998), 13-15 April 1999 (Holt 1999), 17-18 April 1999 (Farrow 1999), 17 March and 20-23 April 2000 (Farrow 2000a,b), 14-15 April and 11-15 May 2000 (Bishop 2000). A maximum of seven was recorded there on 15 April 1997 (King 1997).

SPOTTED WREN BABBLER *Spelaeornis formosus* Nearthreatened species. Uncommon and probably resident. Recorded in March and April in dense undergrowth in warm broadleaved forest and cool broadleaved forest, often near a stream, from 1,000 m to 2,270 m. One to two birds were regularly recorded between Lingmethang and above Yongkhala: in March 1994 (Bishop 1994), April 1996 (Bishop 1996), March and April 1997 (Bishop 1997, Farrow 1997, Redman 1997), April 1998 (Farrow 1998), April 1999 (Farrow 1999) and April 2000 (Kazmierczak and Fisher 2000). Several were singing there from 14-16 April and 13-16 May 2000 (Bishop 2000). Also one to two birds were recorded between Gayzamchu and Thekpaling, between Thekpaling and Kheng Shingkar and near Kheng Shingkhar in April 1998 (Inskipp and Inskipp 1998).

WEDGE-BILLED WREN BABBLER Sphenocichla humei Nearthreatened and restricted-range species. Rare and very local. A flock of 12 was seen in the buffer zone at Chulungbi on 15 January 2000 in bamboo in broadleaved forest at 1,130 m (Inskipp *et al.* 2000).

BLACK-HEADED SHRIKE BABBLER *Pteruthius rufiventer* Rare and local, probably resident in cool broadleaved forest. One was seen below Namling on 10 April 1998 at 2,300 m (Bishop 1999c), three were seen in the same area at 2,390 m on 28 January 2000 (Inskipp *et al.* 2000) and two males were singing at 2,500 m and 2,700 m on 11 May (Bishop 2000).

HOARY-THROATED BARWING Actinodura nipalensis Restricted-range species. Uncommon and local; probably resident in cool broadleaved and hemlock forests; recorded in January, from March to early May and in October from 2,205 m to 2,840 m. Only recorded between Sengor and Namling: one was seen in October 1991 (Inskipp and Inskipp 1993), two in March 1994 (Bishop 1994), seen in April 1995 (Bishop 1995), two in April 1997 (Farrow 1997), one in April 1997 (King 1997), four in April 1998 (King 1998) and singles in April 1998 (Bishop 1998, Farrow 1998), one in April 1999 (Farrow 1999) and two in April 2000 (Farrow 2000). A maximum of 10 was seen on 5 January 2000 (Inskipp *et al.* 2000).

YELLOW-THROATED FULVETTA Alcippe cinerea Nearthreatened species. Probably resident; recorded in January, from March to mid May and October in warm broadleaved and cool broadleaved forests between 1,600 m and 2,500 m. Locally fairly common between Yongkhala and Namling (many observers). Several observed collecting and carrying nest material there on 12 May 2000 (Bishop 2000). Also recorded between Thekpaling and Kheng Shingkhar and around Kheng Shingkhar in April 1998 (Inskipp and Inskipp 1998). A maximum of 40 was seen between Lingmethang and Yongkhala on 19 January 1995 (King 1995). One was seen carrying nest material between Thekpaling and Kheng Shingkhar on 19 April 1998 at 1,740 m (Inskipp and Inskipp 1998).

WHITE-NAPED YUHINA Yuhina bakeri Restricted-range species. Probably resident; recorded in January and from March to mid May, mainly in warm broadleaved forest with an understorey of tall bamboo, also in cool broadleaved forest from 1,005 m to 2,030 m (many observers). Generally fairly common, but common in the Yunari valley in the buffer zone (Inskipp *et al.* 2000). Regularly recorded between Yongkhala and Namling; also recorded between Gayzamchu and Thekpaling and between Thekpaling and Kheng Shingkhar in April 1998 (Inskipp and Inskipp 1998), between Omdor and Saleng and below Saleng in January 2000 (Inskipp *et al.* 2000), and in the buffer zone in the Yunari valley, around Broksar and Chulungbi and at Gulibi in January 2000 (Inskipp *et al.* 2000). A maximum of 80 was seen between Lingmethang and Namling on 18 January 1995 (King 1995).

GREATER RUFOUS-HEADED PARROTBILL *Paradoxornis ruficeps* Near-threatened species. Very local and probably resident; only recorded above Yongkhala where fairly common in a narrow altitudinal belt from 1,825 m to 1,930 m in warm broadleaved forest (many observers). Regularly recorded in January, from March to early May and in October. A maximum of 45 was recorded on 18 January 1995 (King 1995).

Table 1 Important habitats for birds

Number of speci	ies recorded
Warm broadleaved forest	210
Cool broadleaved forest*	146
Fir	89
Hemlock	71
Agricultural land/around habitation	68
Wetlands (rivers, streams & marshes)	17

* This habitat has not been comprehensively surveyed and the figure is proportionally low compared with the other habitats

Warm broadleaved forest was found to support the highest diversity of bird species; 62% of species recorded in the park were found there. This forest type was important for birds throughout the year, supporting the highest number of both breeding and wintering species. Many species in the park are altitudinal migrants descending to winter in warm broadleaved forest. The warm broadleaved forests around and below Saleng (1,270-1,700 m) in the core area of the park were found to be especially rich in bird species and numbers. We have not previously seen or heard of such bird densities in Himalayan forests. Single species flocks included up to 30 Green-tailed Sunbirds Aethopyga nipalensis, 100 Rufous Sibias Heterophasia capistrata, 30 Black-faced Warblers Abroscopus schisticeps and 50 Whiskered Yuhinas Yuhina flavicollis.

Cool broadleaved forest was found to be less diverse in bird species, but also valuable for birds throughout the year. Although the birds in this forest type are underrecorded, it is unlikely that the final species total will approach that found in warm broadleaved forest. Fir and hemlock forests with rhododendron and bamboo were found to be the richest in bird species at higher altitudes. A well-developed bamboo understorey was valuable for birds in all forest types, supporting rare species and specialities such as Chestnut-breasted Partridge, Satyr Tragopan, Broad-billed Warbler, Slender-billed Scimitar Babbler, Wedge-billed Wren Babbler and parrotbills. The two globally threatened species, Rufous-necked Hornbill and Beautiful Nuthatch, are dependent on mature trees, and the hornbill needs fruiting trees throughout the year.

Forests in relatively small areas in the park have been cleared to make way for agriculture, pastures and villages, the latter mainly in the buffer and multi-use zones. Species recorded in these cleared areas were either only found in these habitats or frequently recorded there. A significant number of other species were occasionally recorded in open areas (especially below 1,850 m), either because they were passing through these habitats from one forest to another, or because they temporarily moved from adjacent forest to feed in open areas. A few species which breed in forests, notably Plain-backed Thrush Zoothera mollissima and Long-tailed Thrush Z. dixoni were mainly recorded in pastures in winter, but in the breeding season they were restricted to forests. The cleared areas support a far lower number of bird species than forests, especially broadleaved forests, at similar altitudes, although birds were more easily located in open areas.

The authors are very grateful to the Nature Conservation Division, Department of Forests, Bhutan for arranging counterparts in 1998 and 2000 and logistics in the field in 1998 and to Dr Sangay Wangchuk, Head of the Nature Conservation Division for allowing us to write this paper. We are indebted to Sonam Wangchuk, Park Manager, and Sangay Dorji, Park Warden, for organizing field logistics in 2000, and also our itinerary which proved to be excellent. We warmly thank all those who worked with us in the field, especially Sangay Dorji, Park Warden, and Rinchen Singye and Sherubla, Park Forest Guards, in 2000, and also those who accompanied us in 1998: Pema Gyaltsen (Deputy Ranger), Sangay Dorji (Assistant Taxidermist and Deputy Ranger) and Yeshey Dorji (Forest Guard) from the Nature Conservation Division, B. S. Mongar from Bumthang Forest Services Division and Tashi our cook. CI and TI greatly appreciate the invitation from the Nature Conservation Division to visit Bhutan in 1998 and 2000. Special thanks go to the WWF Bhutan Programme for both funding our visits and the avifauna-cum-training surveys of the park. Finally, we are grateful to the following people who generously gave us their bird records from Thrumshingla National Park: David Bishop (Victor Emanuel Nature Tours), Niels Dreyer, Dave Farrow (Birdquest), David Fisher (Sunbird), Paul Holt (Sunbird), Hannu Jannes, Krys Kazmierczak (Sunbird), Ben King (KingBird Tours), Rebecca Pradhan (Royal Society for the Protection of Nature, Bhutan), Nigel Redman, and Durga Devi Sharma (Nature Conservation Division).

REFERENCES

a) Numbered references cited in Appendix

- 1. Aste, C. (1995) Forestry Integrated Wildlife Management, Wangthangla-Thrumshingla, Bhutan. Integrated Forest Management Project. Final report. Vienna, Austria: Institute for Wildlife biology and Game Management.
- Bishop, K. D. (1994) The list of birds and mammals observed on the Vent Bhutan and Assam tour, February 26 - April 5, 1994. Unpublished.
- Bishop, K. D. (1995) Assam & Bhutan, March 14-April 13, 1995. Victor Emanuel Nature Tours. Unpublished.
- 4. Bishop, K. D. (1996) Notes on birds seen in Bhutan in 1996. Unpublished.
- Bishop, K. D. (1997b) The birds and mammals recorded on the VENT Bhutan Tour, April 12th-May 2nd, 1997. Unpublished.
- 6. Bishop, K. D. (1998) The birds and mammals recorded on the 1998 VENT Bhutan Tour. Unpublished.
- 7. Bishop, K. D. (1999a) The birds and mammals recorded on the 1999 VENT Bhutan Tour. Unpublished.
- 8. Bishop, K. D. (1999b) The road between Ura and Limithang in eastern Bhutan. *Oriental Bird Club Bull.* 29: 42-47.

- 9. Bishop, K. D. (1999c) Preliminary notes on some birds in Bhutan. *Forktail* 15: 87-91.
- Bishop, K. D. (2000) Notes on birds recorded in Bhutan, April-May 2000. Unpublished.
- 11. Dreyer, N. P. (1995) Trip report: Bhutan, January 8-27 1995. Unpublished.
- Farrow, D. (1995) Bhutan & Assam, 28 Oct. 18 Nov. '95. Explore Worldwide Tour. Unpublished.
- 13. Farrow, D. (1997) Birdquest Bhutan 1997. Unpublished.
- 14. Farrow, D. (1998) Birdquest Bhutan 1998. Unpublished.
- 15. Farrow, D. (1999) Birdquest Bhutan 1999. Unpublished.
- 16. Farrow, D. (2000a) Birdquest Bhutan 2000. Unpublished.
- 17. Farrow, D. (2000b) Bhutan 2000. Unpublished.
- Holt, P. (1995) Bhutan, 24 February 9 March 1995. Unpublished.
- 19. Holt, P. (1996) Bhutan, 8 21 April 1996. Unpublished.
- 20. Holt, P. (1998) Sunbird tour of Bhutan, 5 22 April 1998. Unpublished.
- 21. Holt, P. (1999) Sunbird tour of Bhutan, April 1999. Unpublished.
- 22. Inskipp, C. and Inskipp, T. (1993) Birds recorded during a visit to Bhutan in autumn 1991. *Forktail* 8: 97-112.
- 23. Inskipp, C. and Inskipp, T. (1998) Birds recorded during a visit to Bhutan in April-May 1998. Unpublished.
- 24. Inskipp, C. and Inskipp, T. (2000) Birds recorded during a visit to Bhutan in January 2000. Unpublished.
- 25. Jännes, H. (2000) Birds recorded during a visit to Bhutan in April. Unpublished.

- Kazmierczak, K. and Fisher, D. (2000) Sunbird tour of Bhutan, 9-26 April 2000. Unpublished.
- King, B. (1995) KingBird tour, Bhutan, 8-27 January 1995. Unpublished.
- King, B. (1996) 1996 KingBird tour, Bhutan, 28 April 18 May. Unpublished.
- King, B. (1997) 1997 KingBird tour, Bhutan, 6-26 April. Unpublished
- King, B. (1998) 1998 KingBird tour, Bhutan, 28 March-17 April. Unpublished
- 31. Pradhan, R. (1997) Bamboo and cane survey in Middle Kheng areas, Ura to Dagpai, 28/1/97 to 8/2/97. Unpublished.
- 32. Redman, N. J. (1997) Birds recorded during a visit to Bhutan in March 1997. Unpublished.
- Sharma, D. D. (1998) Notes on birds recorded in Bhutan. Unpublished.

b) Other references

- Anon (1998) Biodiversity Action Plan for Bhutan. Nature Conservation Division, Royal Government of Bhutan.
- BirdLife International (in prep.) *Threatened birds of Asia*. Cambridge, BirdLife International.
- MacKinnon, J. and Phillipps, K. (1993) The birds of Borneo, Sumatra, Java and Bali. Oxford: Oxford University Press.
- Stattersfield, A. J., Crosby, M. J., Long, A. J. and Wege, D. C. (1998) Endemic Bird Areas of the world: priorities for bird conservation. Cambridge: BirdLife International.

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		Habitat	Altitudinal range (m)	Recorded by
GALLIFORMES				
Phasianidae				
HILL PARTRIDGE Arborophila torqueola	r2	CB, F, H, WB	2195-3550	3, 6, 10, 14, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32
RUFOUS-THROATED PARTRIDGE Arborophila rufogularis	r2	WB	850-2500	3, 4, 5, 6, 14, 21, 23, 24, 25, 30, ?31, 32
CHESTNUT-BREASTED PARTRIDGE Arborophila mandellii	r5	WB	1860-1980	?3, 8, 10, 15, 16, 17, 21, 23, 24, 25, 30
BLOOD PHEASANT Ithaginis cruentus	r2	F	3200-4250	1, 4, 6, 8, 10, 11, 14, 20, 23, 24, 26, 30, 33
Satyr Tragopan Tragopan satyra	r4	CB, F	1900-3850	1, 2, 7, 8, 9, 10, 11, 13, 14, 15, 16, 23, 26, 27, 24, 30, 33
HIMALAYAN MONAL Lophophorus impejanus	r3	A, F	3180-4050	1, 8, 23, 33
Kalij Pheasant Lophura leucomelanos	r2	CB, WB	890-2900	5, 6, 10, 14, 23, 24, 30, 33
PICIFORMES				
Indicatoridae				
YELLOW-RUMPED HONEYGUIDE Indicator xanthonotus	r5	СВ	1900-2200	8, 10, 14, 15, 26, ?28, 24, 30
Picidae				
SPECKLED PICULET Picumnus innominatus	r4		1000	3, 4, 5, 8, 10
WHITE-BROWED PICULET Sasia ochracea	r4	WB	1000-1800	6, 10, 13, 19, 21, 24, 27
GREY-CAPPED PYGMY WOODPECKER Dendrocopos canicapillus	r4	WB	820-1020	24, 27
Fulvous-breasted Woodpecker Dendrocopos macei	r4	WB	800	24
RUFOUS-BELLIED WOODPECKER Dendrocopos hyperythrus	r?3	CB, H	2040-2880	5, 10, 13, 14, 23, 28

APPENDIX Checklist of birds of Thrumshingla National Park, Bhutan

CRIMSON-BREASTED WOODPECKER	r3	CB, O, WB	1165-2240	1, 5, 6, 7, 8, 10, 11, 13, 14, 19, 21, 23, 24,
Dendrocopos cathpharius DARJEELING WOODPECKER	r3	CB, F, WB	1700-3680	25, 26, 27, 28, 30, 32, 33 1, 2, 5, 7, 10, 11, 13, 14, 23, 24, 28, 24, 33
Dendrocopos darjellensis RUFOUS WOODPECKER Celeus brachvurus	r5		1000	17
LESSER YELLOWNAPE	r3	WB	1335-1700	2, 11, 24, 27, 24, 30
Picus chlorolophus GREATER YELLOWNAPE	r3	CB, WB	920-1930	3, 10, 19, 24
Picus flavinucha Grey-headed Woodpecker	r3	CB, O, WB	800-1930	3, 4, 5, 6, 24, 25
Picus canus	-			
BAY WOODPECKER Blythipicus pyrrhotis	r3	CB, WB	820-2805	2, 3, 4, 5, 10, 11, 13, 14, 19, 20, 21, 23, 24, 26, 27, 28, 24, 30, 31, 32
Megalaimidae Great Barbet	r1	CB, O, WB	850-2635	10, 11, 14, 19, 20, 21, 22, 23, 24, 26, 27, 28
Megalaima virens Golden-throated Barbet	r2	CB, WB	1510-2450	24, 30, 32 2, 4, 5, 6, 10, 11, 14, 19, 20, 21, 22, 23, 24,
Megalaima franklinii BLUE-THROATED BARBET	r4	WB	870-1830	26, 27, 24, 30, 32 2, 4, 5, 7, 10, 23, 24, 25, 27, 32
Megalaima asiatica BUCEROTIFORMES				
Bucerotidae				
RUFOUS-NECKED HORNBILL Aceros nipalensis	r3	WB	1005-2100	3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 26, 28, 24, 25, 30, 31, 32
UPUPIFORMES				
Upupidae Common Hoopoe	sm5	A	3100-3600	6, 21, 23, 24, 30
Upupa epops TROGONIFORMES				
Trogonidae				
RED-HEADED TROGON Harpactes erythrocephalus	r3	CB, WB	970-1955	3, 5, 7. 8, 11, 13, 14, 24, 25, 27
WARD'S TROGON Harpactes wardi	r5	CB	1860-2500	2, 5, 6, 8, 9, 13, 14, 15, 16, 20, 21, 24, 28, 24, 30, 32
CORACIIFORMES				24, 50, 52
Halcyonidae WHITE-THROATED KINGFISHER	r5	W		4, 5, 6
Halcyon smyrnensis Cervlidae				
CRESTED KINGFISHER Megaceryle lugubris	r4	W	770-930	24, 27
Meropidae				
BLUE-BEARDED BEE-EATER Nyctyornis athertoni	r 3	WB	845-1980	3, 5, 6, 7, 8, 10, 11, 16, 19, 22, 23, 24, 26, 27, 30
CUCULIFORMES Cuculidae				
CHESTNUT-WINGED CUCKOO	s5		1600	14
Clamator coromandus	-1		1645 2470	
Large Hawk Cuckoo Hierococcyx sparverioides	s1	CB, F, H, WB	1645-2470	2, 3, 8, 10, 14, 19, 20, 21, 23, 26, 28, 24, 25, 30, 32, 33
Hodgson's Hawk Cuckoo Hierococcyx fugax	s3	CB, WB	1730-2320	8, 10, 14, 21, 23, 25, 26, 28, 24, 30
INDIAN CUCKOO Cuculus micropterus	s2	CB, WB	1740-2120	8, 10, 13, 14, 19, 23, 25, 26, 28
Eurasian Cuckoo <i>Cuculus canorus</i>	s2	CB, F	1900-3150	1, 8, 10, 14, 20, 21, 23, 25, 26, 28
ORIENTAL CUCKOO Cuculus saturatus	s2	CB, F, WB	1650-3050	2, 5, 8, 10, 14, 19, 20, 21, 23, 26, 28, 24, 25, 30, 32
Lesser Cuckoo <i>Cuculus poliocephalus</i>	s3	CB, H, WB	1770-3050	5, 8, 10, 13, 23, 28, 32
PLAINTIVE CUCKOO Cacomantis merulinus	s4	WB	1700	5, 7, 23
Asian Emerald Cuckoo Chrysococcyx maculatus	s4	WB	1000-2000	5, 7, 10, 13, 14, 20, 21, 23, 26, 30
DRONGO CUCKOO Surniculus lugubris	s4	WB	1000-1820	4, 5, 6, 8, 10, 14, 20, 21, 23, 26, 28
GREEN-BILLED MALKOHA Phaenicophaeus tristis	r5	WB	800-1700	22, 24
APODIFORMES				
Apodidae Himalayan Swiftlet	r2	CB, F, WB	815-2610	4, 6, 7, 8, 10, 14, 21, 23, 24, 26, 24, 25,
Collocalia brevirostris White-throated Needletail	s?4	F	1640-3510	<u>30, 32</u> 5, 6, 7, 8, 10, 19, 21, 23, 33
Hirundapus caudacutus	21.4	1	10-10-0110	5, 0, 7, 0, 10, 17, 21, 25, 55

Fork-tailed Swift Apus pacificus	s2	CB, F, WB	1780-3230	4, 5, 6, 7, 8, 10, 14, 19, 20, 21, 23, 26, 28, 24, 25, 30
STRIGIFORMES				
Strigidae				
MOUNTAIN SCOPS OWL Otus spilocephalus	r4	WB	1500-1770	3, 10, 13, 14, 19, 20, 21, 23, 25
Collared Scops Owl Otus bakkamoena	r3	WB	500-1700	4, 5, 6, 7, 10, 16, 21, 24
BROWN WOOD OWL Strix leptogrammica	r5	CB	1955	24, 25
Tawny Owl Strix aluco	r5	CB	2815-2900	10, 14, 24
Collared Owlet Glaucidium brodiei	r2	CB, WB	1100-2375	3, 5, 6, 10, 13, 14, 19, 21, 22, 23, 24, 25, 26, 27, 28, 24, 30, 32
Asian Barred Owlet Glaucidium cuculoides	r3	CB, WB	800-2900	2, 3, 4, 5, 7, 10, 13, 14, 21, 23, 24, 25, 26, 27, 28, 24, 30, 32
BROWN HAWK OWL Ninox scutulata	r5			5
Caprimulgidae				
Grey Nightjar Caprimulgus indicus	r?3	F, WB	1490-3130	3, 5, 13, 14, 21, 23, 24
COLUMBIFORMES				
Columbidae		•		6 00 04
Rock Pigeon Columba livia	r4	A	3130	6, 23, 24
SNOW PIGEON Columba leuconota	r3	A, H	2200-3600	1, 2, 4, 8, 13, 22, 24, 31
SPECKLED WOOD PIGEON Columba hodgsonii	r3	CB, H, WB	770 3260	2, 3, 4, 8, 15, 19, 21, 22, 23, 24, 26, 28
ORIENTAL TURTLE DOVE Streptopelia orientalis	r1	A, CB, F, H, P, WB	770-3260	1, 10, 14, 19, 20, 21, 22, 23, 24, 28, 24, 25, 30, 31, 32, 33
Spotted Dove Streptopelia chinensis Barred Cuckoo Dove	r1 	A CB,WB	1750	6, 7, 10, 24 7, 10, 19, 21, 23, 24, 26
Macropygia unchall			1500-1930	
Emerald Dove Chalcophaps indica	r5	WB	1165	7, 14, 24
WEDGE-TAILED GREEN PIGEON Treron sphenura	r3	WB	1490-2200	8, 10, 11, 23, 24, 27, 28
GRUIFORMES Rallidae				
BLACK-TAILED CRAKE Porzana bicolor	r?5	W	1100	8, 9, 24
CICONIIFORMES				
Scolopacidae Scolopacinae				
EURASIAN WOODCOCK Scolopax rusticola	r3	A, CB, F, H, WB	1740-3500	10, 11, 14, 23, 24, 25
Solitary SNIPE Gallinago solitaria	?5		3000	11
Tringinae	E	W/	2000	02
GREEN SANDPIPER Tringa ochropus	m5	W	3090	23
Charadriidae Recurvirostrinae				
Recurvirostrinae Ibisbill Ibidorhyncha struthersii	?5	W	1470	24
Accipitridae				
Pandioninae Osprey Pandion haliaetus	m5	W	800	13, 23
Accipitrinae				
ORIENTAL HONEY-BUZZARD Pernis ptilorhyncus	r?m?5		1830	3, 5, 6, 13, 21
BLACK KITE Milvus migrans	r?m?5	A, WB	1700-3100	13, 23, 24
Lammergeier	r5		4250	1
Gypaetus barbatus Himalayan Griffon Guns himalayansis	r3	F	3600	1, 4, 6, 7, 11, 23
Gyps himalayensis Crested Serpent Eagle Spilornis cheela	r?s?4	WB	1140-1885	5, 6, 10, 19, 23, 24, 26, 30, 32
Hen Harrier	wm5	A	2000-3000	5, 24, 31

CRESTED GOSHAWK	r5			5, 13, 14, 21, 22, 26
Accipiter trivirgatus SHIKRA Accipiter badius	r5	WB	850-1130	6, 23, 24
BESRA	r5			2, 4, 7, 11
Accipiter virgatus Eurasian Sparrowhawk	rwm3	CB, F, H, WB	940-3600	1, 5, 6, 7, 11, 20, 21, 23, 24, 25, 30
Accipiter nisus Northern Goshawk	r4	A, WB	1800-3300	1, 2, 3, 4, 5, 19, 20, 23, 24, 33
Accipiter gentilis COMMON BUZZARD Buteo buteo	wm3	A	3000-3550	1, 6, 11, 14, 21, 23, 24, 27, 30, 32
Long-Legged Buzzard Buteo rufinus	wm5			1, 6, 24, 33
UPLAND BUZZARD Buteo hemilasius	r?w?m?5	A, F	3250-3425	3, 7, 21, 23
BLACK EAGLE Ictinaetus malayensis	r3	CB, F, WB	1380-3250	2, 3, 5, 6, 8, 10, 11, 19, 20, 21, 23, 24, 25, 26, 27, 31, 32
Bonelli's Eagle Hieraaetus fasciatus	r5			1, 6
BOOTED EAGLE Hieraaetus pennatus	r?w?m?5	WB	1200	24
RUFOUS-BELLIED EAGLE Hieraaetus kienerii	r4	WB	1700-1850	2, 3, 5, 11, 14, 15, 23, 24, 26, 27
Mountain Hawk Eagle Spizaetus nipalensis	r3	CB, WB	1700-2240	1, 6, 10, 11, 14, 19, 21, 23, 24, 25, 26, 27, 30, 31, 32
Falconidae		-		
Common Kestrel Falco tinnunculus	r?w?4	А	805-1745	5, 6, 24
EURASIAN HOBBY Falco subbuteo	m5			11
ORIENTAL HOBBY Falco severus	r?5	WB	1770	23
Peregrine Falcon Falco peregrinus	r?w?5	А	3200	1, 23, 24, 31
Phalacrocoracidae Great Cormorant	wm5	W	770	24
Phalacrocorax carbo PASSERIFORMES				
Pittidae				
BLUE-NAPED PITTA Pitta nipalensis	r?5	WB	1050-1820	14, 16, 17, 21, 24
Eurylaimidae LONG-TAILED BROADBILL Psarisomus dalhousiae	r5	WB	1270, 2100	7, 10, 16, 21, 24
Irenidae		CP W/P	800.2100	2 2 4 5 7 10 14 22 22 24 26 27
ORANGE-BELLIED LEAFBIRD Chloropsis hardwickii Laniidae	r3	CB, WB	800-2100	2, 3, 4, 5, 7, 10, 14, 22, 23, 24, 26, 27, 24, 25
Lamidae Long-tailed Shrike Lanius schach	r3	А	930-1750	10, 24, 25
GREY-BACKED SHRIKE Lanius tephronotus	rs3	A, F, H, LA	780-3300	10, 14, 19, 20, 23, 24, 25, 31
Corvidae				
Corvinae Corvini				
Eurasian Jay	r5	СВ	1955-2055	24
Garrulus glandarius YELLOW-BILLED BLUE MAGPIE	r2	CB, F, H	2000-3210	2, 3, 10, 21, 22, 23, 24, 28, 24, 25, 30,
Urocissa flavirostris COMMON GREEN MAGPIE	r4	CB, WB	770-2500	31, 32 8, 11, 13, 14, 24, 29, 32
Cissa chinensis GREY TREEPIE		-		
Linnarocatta torracian	r2	CB, O, WB	770-2000	2, 3, 4, 7, 10, 14, 19, 20, 23, 24, 25, 26,
Dendrocitta formosae Collared Treepie Dendrocitta frontalis	r2 ?5	-	770-2000	2, 3, 4, 7, 10, 14, 19, 20, 23, 24, 25, 26, 27, 28, 29, 30, 32 19
COLLARED TREEPIE Dendrocitta frontalis BLACK-BILLED MAGPIE		-		27, 28, 29, 30, 32
COLLARED TREEPIE Dendrocitta frontalis BLACK-BILLED MAGPIE Pica pica Spotted NUTCRACKER	?5	CB, O, WB	1500	27, 28, 29, 30, 32 19 1, 14, 19, 23, 24, 33 1, 3, 4, 8, 10, 13, 14, 19, 21, 23, 24, 25,
COLLARED TREEPIE Dendrocitta frontalis BLACK-BILLED MAGPIE Pica pica SPOTTED NUTCRACKER Nucifraga caryocatactes RED-BILLED CHOUGH	?5 r2	CB, O, WB	1500 3100-3370	27, 28, 29, 30, 32 19 1, 14, 19, 23, 24, 33
COLLARED TREEPIE Dendrocitta frontalis BLACK-BILLED MAGPIE Pica pica SPOTTED NUTCRACKER Nucifraga caryocatactes	?5 r2 r2	CB, O, WB A F, H, P	1500 3100-3370 2860-3950	27, 28, 29, 30, 32 19 1, 14, 19, 23, 24, 33 1, 3, 4, 8, 10, 13, 14, 19, 21, 23, 24, 25, 28, 29, 30, 32, 33

SLENDER-BILLED ORIOLE	s?m?5			4
Oriolus tenuirostris Maroon Oriole	r?3	CB, WB	1700-2135	2, 3, 10, 14, 19, 20, 21, 23, 24, 25, 26,
Oriolus traillii BLACK-WINGED CUCKOOSHRIKE	r?3	CB, WB	1630-2040	28, 29 2, 3, 5, 6, 7, 10, 14, 19, 20, 21, 23, 25,
Coracina melaschistos Grey-chinned Minivet	r3	CB, WB	800-2410	26, 28, 29, 30, 32 2, 4, 5, 6, 7, 10, 11, 13, 14, 19, 21, 22, 23,
Pericrocotus solaris Long-tailed Minivet	r?2	CB, F, H, WB	820-3510	24, 25, 27, 29, 30, 32 1, 3, 10, 14, 20, 21, 23, 24, 25, 29, 30, 31
Pericrocotus ethologus Short-Billed Minivet	r?3	CB, WB	1640-2340	5, 10, 14, 19, 20, 21, 23, 25, 29, 30, 32
Pericrocotus brevirostris SCARLET MINIVET Pericrocotus flammeus	r?5	WB	820	4, 5, 7, 10, 14, 24
Bar-winged Flycatcher-shrike Hemipus picatus Dicrurinae	r3	WB	810-1690	7, 24
Rhipidurini Yellow-bellied Fantail	r1	CB, F, H, WB	770-3115	2, 3, 5, 6, 7, 10, 14, 19, 20, 23, 24, 25,
Rhipidura hypoxantha				26, 27, 28, 29, 30, 31, 32
WHITE-THROATED FANTAIL Rhipidura albicollis	r3	CB, O, WB	920-2375	2, 4, 5, 6, 7, 10, 11, 14, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33
Dicrurini Ashy Drongo	r?1	CB, H, WB	890-2135	1, 10, 14, 19, 20, 21, 23, 24, 25, 26, 29,
Dicrurus leucophaeus Bronzed Drongo	r3	CB, WB	770-2030	<u>30, 32, 33</u> 4, 7, 24, 32
Dicrurus aeneus Lesser Racket-tailed Drongo Dicrurus remifer	r3	CB, WB	940-2100	4, 13, 14, 19, 21, 23, 24, 25, 26, 32
Spangled Drongo Dicrurus hottentottus	r?5	WB	800-1850	7, 22, 23, 25
Cinclidae Brown Dipper Cinclus pallasii	r3	W	770-3050	23, 24, 31
Muscicapidae				
Furdinae Blue-capped Rock Thrush	s3	WB	1500-1790	2, 3, 4, 8, 10, 14, 19, 20, 21, 23, 25, 26,
Monticola cinclorhynchus Chestnut-bellied Rock Thrush	r3	CB, F, H, WB	800-3230	28, 29, 30 2, 3, 5, 6, 7, 8, 10, 14, 19, 20, 21, 23, 24,
Monticola rufiventris BLUE ROCK THRUSH	w4	A	790-1830	25, 26, 27, 28, 29, 30, 32 5, 6, 24
Monticola solitarius BLUE WHISTLING THRUSH	r1	A, CB, F, H,	770-3460	3, 10, 14, 19, 20, 21, 23, 24, 25, 26, 27,
Myophonus caeruleus Plain-backed Thrush	r2	W, WB A, CB, F, H, WB	1140-3425	28, 29, 30, 31, 32, 33 5, 6, 10, 11, 16, 23, 24, 29, 30
Zoothera mollissima Long-tailed Thrush	r4	A, WB	1010-1840	11, 14, 24
Zoothera dixoni Scaly Thrush	r?5	WB	1000-1800	16, 24
Zoothera dauma Long-Billed Thrush	?5			11, 30
Zoothera monticola			1020 2500	
WHITE-COLLARED BLACKBIRD Turdus albocinctus	r2	A, CB, F, H	1830-3790	1, 2, 3, 5, 6, 7, 10, 14, 19, 20, 23, 24, 25, 26, 28, 29, 30, 32
Grey-winged Blackbird Turdus boulboul	r?2	CB, WB	1630-1935	5, 6, 7, 10, 14, 21, 23, 25, 29, 30, 31, 33
Eurasian Blackbird Turdus merula	w5	F	3200	10, 17
Chestnut Thrush Turdus rubrocanus	w5	A, CB	2240-2815	24, 25, 30
Kessler's Thrush Turdus kessleri	w5	F	3200	10, 17
Dark-throated Thrush Turdus ruficollis	wm4	A, CB, F, H	1830-3130	1, 6, 23, 24, 25, 26, 30, 32
Dusky Thrush Turdus naumanni	m5	Н	3005	6, 24, 26
Lesser Shortwing Brachypteryx leucophrys	r?3	CB,WB	1640-2060	4, 5, 6, 7, 8, 10, 13, 14, 23, 28, 29, 30
WHITE-BROWED SHORTWING Brachypteryx montana Muscicapinae	r?3	F, H, WB	1270-3510	2, 6, 7, 8, 10, 13, 19, 20, 21, 23, 24, 26, 28
Muscicapini				
Dark-sided Flycatcher Muscicapa sibirica	s2	CB, F, H, WB	1770-3510	5, 6, 10, 14, 19, 20, 21, 23, 25, 26, 28, 29, 30, 31, 33

Muscicapa dauurica	s?m?5			4, 5, ?26
Ferruginous Flycatcher Muscicapa ferruginea	s4	H, WB	1655-2950	23
SLATY-BACKED FLYCATCHER Ficedula hodgsonii	?5		2340	19, 20
RUFOUS-GORGETED FLYCATCHER Ficedula strophiata	r2	CB, F, H, WB	915-3640	5, 6, 7, 10, 11, 14, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32
WHITE-GORGETED FLYCATCHER Ficedula monileger	r5	WB	1400-2000	10, 13, 15, 21, 24, 32
SNOWY-BROWED FLYCATCHER Ficedula hyperythra	r?5	F	2590-2600	3, 10, 16, 23, 29
LITTLE PIED FLYCATCHER Ficedula westermanni	r3	WB	890-1770	2, 3, 4, 5, 6, 7, 8, 10, 20, 21, 22, 23, 24, 25, 26, 29, 30, 32
ULTRAMARINE FLYCATCHER Ficedula superciliaris	s3	CB, WB	890-2130	4, 5, 6, 7, 8, 10, 14, 20, 23, 24, 25
SLATY-BLUE FLYCATCHER Ficedula tricolor	r?s?3	F, H, WB	1725-3640	5, 7, 10, 19, 21, 23, 25, 26, 29
SAPPHIRE FLYCATCHER Ficedula sapphira	r?s?5	WB	1690-2300	8, 15, 23, 28, 29, 30, 32
Verditer Flycatcher Eumyias thalassina	s?1	CB, WB	1630-2850	2, 10, 14, 19, 20, 21, 22, 23, 25, 26, 28, 29, 30, 32
Large Niltava Niltava grandis	r2	CB, WB	850-2710	2, 3, 5, 6, 7, 10, 11, 13, 14, 19, 20, 21, 23, 24, 25, 26, 27, 29, 30
SMALL NILTAVA Niltava macgrigoriae	r?3	WB	800-1875	2, 3, 4, 5, 6, 7, 10, 14, 20, 21, 23, 24, 25, 29, 30, 32
Rufous-Bellied Niltava Niltava sundara	r?3	WB	1150-1930	1, 5, 6, 10, 14, 19, 20, 21, 23, 24, 25, 26, 29, 30, 33
PALE BLUE FLYCATCHER Cyornis unicolor	r?5	WB	1820-1890	6, 10, 14, 15, 21, 23, 30
BLUE-THROATED FLYCATCHER Cyornis rubeculoides	r?4	CB, WB	800-2090	3, 4, 5, 6, 7, 8, 10, 13, 14, 22, 23
PYGMY BLUE FLYCATCHER Muscicapella hodgsoni	r?s?4	WB	1695-2700	3, 4, 7, 8, 10, 14, 15, 21, 23, 25, 28, 29, 30
GREY-HEADED CANARY FLYCATCHER Culicicapa ceylonensis	r3s1	CB, WB	840-2090	2, 10, 11, 14, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31, 32
Saxicoli			1000 0050	
ORANGE-FLANKED BUSH ROBIN Tarsiger cyanurus	r2	A, CB, F, O, WB	1000-2850	1, 2, 3, 6, 7, 10, 11, 14, 21, 23, 24, 25, 26, 27, 29, 30, 31, 32
Golden Bush Robin Tarsiger chrysaeus	r4	A, CB, F, WB	1100-3455	2, 3, 4, 5, 10, 14, 20, 21, 22, 23, 24, 25, 27, 29, 30
WHITE-BROWED BUSH ROBIN Tarsiger indicus	r4	СВ	2600-2810	10, 11, 13, 22, 24, 27
RUFOUS-BREASTED BUSH ROBIN Tarsiger hyperythrus	w3	CB, WB	990-2500	1, 10, 11, 24, 27, 33
ORIENTAL MAGPIE ROBIN Copsychus saularis	r2	A, WB	780-1750	2, 5, 10, 21, 24, 25, 26, 32
BLUE-CAPPED REDSTART Phoenicurus coeruleocephalus	?5		2250	32
HODGSON'S REDSTART Phoenicurus hodgsoni	wm4	А	790-3100	2, 24, 32
WHITE-THROATED REDSTART Phoenicurus schisticeps	w3	А	3100-3620	1, 11, 24
BLUE-FRONTED REDSTART Phoenicurus frontalis	r1	A, CB, F, H, WB	770-3710	2, 5, 11, 14, 19, 20, 21, 23, 24, 25, 26, 27, 29, 30, 31, 32
WHITE-CAPPED WATER REDSTART Chaimarrornis leucocephalus	r2	W	770-4250	1, 2, 10, 14, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33
PLUMBEOUS WATER REDSTART Rhyacornis fuliginosus	r2	W	770-3480	2, 8, 10, 14, 19, 20, 21, 23, 24, 26, 28, 29,
WHITE-TAILED ROBIN Myiomela leucura	r4	CB, WB	1720-1980	30, 32, 33 5, 7, 10, 14, 21, 23, 28, 29, 30, 32
BLUE-FRONTED ROBIN Cinclidium frontale	s5	СВ	1850-2500	5, 8, 9, 13, 14, 15, 16, 20, 21, 23, 26, 28, 30
GRANDALA Grandala coelicolor	m5			33
Little Forktail	r3	W	770-2600	5, 7, 10, 11, 13, 14, 20, 24, 26, 28, 29, 30
Enicurus scouleri SLATY-BACKED FORKTAIL Enicurus schietacus	r2	W, WB	770-1850	11, 16, 24
Enicurus schistaceus Spotted Forktail	r3	W, WB	920-2000	6, 11, 24, 27, 31
Enicurus maculatus Purple Cochoa	s5	WB	1840-2200	5, 8, 9, 15, 21, 23, 26
Cashag bumbuman				
Cochoa purpurea ?GREEN COCHOA Cochoa viridis	r5	WB	1470	24

158

GREY BUSHCHAT Saxicola ferrea	r?s3	A, F, H	805-3350	2, 10, 14, 19, 21, 23, 24, 25, 26, 30
Sittidae				
Sittinae		W/D	840.075	5 8 10 16 20 24
Chestnut-bellied Nuthatch Sitta castanea	r3	WB	840-975	5, 8, 10, 16, 20, 24
WHITE-TAILED NUTHATCH Sitta himalayensis	r2	CB, O, WB	1510-2160	1, 3, 10, 14, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33
Beautiful Nuthatch Sitta formosa	r?5	WB	1900	31
Fichodrominae				
WALLCREEPER	w?m?5			8
Tichodroma muraria				
Certhiidae Certhiinae				
Eurasian Treecreeper	r3	F	3155-3805	2, 4, 5, 6, 10, 14, 23, 30, ?31, 33
Certhia familiaris Rusty-flanked Treecreeper	r3	CB, H, WB	1515-3350	2, 7, 11, 14, 24, 26, 29, 32
Certhia nipalensis	15	02,11,12	1919 9990	2, 1, 11, 11, 21, 20, 27, 52
BROWN-THROATED TREECREEPER Certhia discolor	r3	CB, O, WB	840-1975	3, 5, 6, 10, 11, 13, 14, 21, 23, 24, 25, 26, 27, 29
Froglodytinae				
WINTER WREN	r3	A, H	2000-3850	1, 10, 14, 23, 24, 31, 33
<i>Troglodytes troglodytes</i> Paridae				
Remizinae				
Fire-capped Tit	r5		2000	11, 27
Cephalopyrus flammiceps	1.5			, - -
Parinae				
Rufous-vented Tit Parus rubidiventris	r2	F	3100-3810	1, 2, 3, 4, 5, 6, 7, 8, 10, 14, 21, 23, 25, 26, 29, 31, 33
COAL TIT Parus ater	r2	F, H	3000-3800	1, 2, 3, 4, 5, 6, 7, 8, 10, 14, 19, 21, 23, 24, 25, 26, 30, 33
Grey-crested Tit Parus dichrous	r3	F, H	2990-3575	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 14, 23, 24, 25, 26, 29, 30, 31, 32, 33
GREEN-BACKED TIT Parus monticolus	r1	A, CB, H, WB	770-3210	1, 2, 8, 10, 14, 19, 20, 21, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33
l'ellow-cheeked Tit Parus spilonotus	r3	CB, WB	840-2410	3, 5, 6, 7, 10, 11, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32
Yellow-browed Tit Sylviparus modestus	r3	CB, F, H, O, WB	1535-3220	2, 8, 10, 13, 14, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32
Sultan Tit Melanochlora sultanea	r4	WB	890-1860	3, 6, 7, 8, 10, 15, 20, 21, 23, 24, 26
Aegithalidae				
BLACK-THROATED TIT Aegithalos concinnus	r3	CB, WB	850-2200	2, 5, 7, 10, 11, 22, 23, 24, 25, 26, 27, 29, 30, 32
Rufous-fronted Tit Aegithalos iouschistos	r3	F, H	2650-3770	1, 2, 3, 7, 8, 14, 23, 24, 25, 26, 29, 30, 33
Hirundinidae				
Eurasian Crag Martin Hirundo rupestris	r?5		2135	3, 24
Barn Swallow Hirundo rustica	m5			26
Asian House Martin Delichon dasypus	r?s?4	F	3090-3300	10, 21, 23, 26
NEPAL HOUSE MARTIN Delichon nipalensis	r3	CB, WB	815-2530	3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 19, 20, 23, 24, 25, 26, 27, 28, 29, 30, 32
Regulidae				
Goldcrest Regulus regulus	r3	F	3100-3685	1, 3, 14, 23, 24, 26, 33
Pycnonotidae				
STRIATED BULBUL Pycnonotus striatus	r2	CB, WB	1515-2525	3, 4, 5, 6, 7, 10, 13, 14, 19, 20, 21, 22, 23, 24, 25, 26, 29, 30, 31
BLACK-CRESTED BULBUL Pycnonotus melanicterus	r3	WB	770-1345	24
IIMALAYAN BULBUL Pycnonotus leucogenys	r2	A, WB	770-835	4, 5, 6, 24, 25
Red-vented Bulbul Pycnonotus cafer	r1	A, WB	770-1830	10, 21, 24, 25, 26, 27, 32
WHITE-THROATED BULBUL Alophoixus flaveolus	r3	CB, WB	935-1150 (-2240)	5, 24
Ashy Bulbul Hemixos flavala	r3	WB	830-1650	3, 5, 6, 7, 13, 14, 24
Mountain Bulbul	r2	CB, WB	920-2205	3, 4, 5, 6, 7, 10, 21, 23, 24, 30, 32
Hypsipetes mcclellandii	12			-, -, -, -, -, -, -, <u>-</u> , <u>-</u> , <u>-</u> , <u>-</u> ,

BLACK BULBUL Hypsipetes leucocephalus	r2	CB, F, O, WB	940-3210	10, 14, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33
Cisticolidae Striated Prinia Prinia criniger	r4	А	830-1100	7, 10, 21, 24, 26
HILL PRINIA Prinia atrogularis	r3	WB	1530-1820	2, 3, 4, 6, 10, 23, 24, 25, 27, 30, 32
RUFESCENT PRINIA Prinia rufescens	r5	А	930	24
Zosteropidae ORIENTAL WHITE-EYE Zosterops palpebrosus	r3	A, WB	770-1675	3, 4, 5, 6, 7, 10, 21, 24, 26
Sylviidae				
Acrocephalinae CHESTNUT-HEADED TESIA Tesia castaneocoronata	r2	CB, F, H, WB	910-3205	2, 3, 5, 6, 8, 10, 13, 14, 19, 20, 21, 22, 23, 24, 25, 29, 30, 31
SLATY-BELLIED TESIA Tesia olivea	r3	CB, WB	905-1960	2, 3, 4, 5, 6, 7, 10, 14, 20, 21, 23, 24, 25, 26
GREY-BELLIED TESIA Tesia cyaniventer	r?3	CB, WB	1000-2345	2, 4, 5, 6, 7, 10, 14, 19, 21, 23, 25, 26, 28, 29, 30
PALE-FOOTED BUSH WARBLER Cettia pallidipes	r?4	A, CB	1100-1990	24
BROWNISH-FLANKED BUSH WARBLER Cettia fortipes	r4	A, CB, WB	1490-2340	3, 5, 6, 7, 10, 14, 19, 21, 23, 24, 25, 26, 28, 29, 31
ABERRANT BUSH WARBLER Cettia flavolivacea	r?5	A, WB	950-1700	1, 22, 24, 32
YELLOWISH-BELLIED BUSH WARBLER Cettia acanthizoides	r?3	F	2200, 3090-3400	10, 11, 14, 23, 26, 28
GREY-SIDED BUSH WARBLER Cettia brunnifrons	r2	A, CB, F, H, WB	795-3490	1, 3, 4, 5, 6, 8, 10, 14, 19, 20, 21, 23, 24, 25, 27, 28, 29, 30, 32, 33
Mountain Tailorbird Orthotomus cuculatus	r4	WB	1110-2200	2, 4, 7, 11, 13, 15, 19, 20, 21, 24, 25
Common Tailorbird Orthotomus sutorius	r3	A, WB	780-1750	3, 5, 6, 7, 23, 24, 26
TICKELL'S LEAF WARBLER Phylloscopus affinis	s2	WB	1700	3, 5, 6, 7, 10, 13, 14, 19, 23, 25, 26, 31
BUFF-BARRED WARBLER Phylloscopus pulcher	r?2	F, WB	1680-3810	2, 5, 7, 10, 13, 21, 23, 24, 25, 26, 28, 29, 30, 32, 33
Ashy-throated Warbler Phylloscopus maculipennis	r3	CB, F, H, O, WB	845-3170	2, 5, 6, 7, 8, 10, 13, 14, 19, 21, 23, 24, 25, 26, 27, 28, 29, 30, 32
LEMON-RUMPED WARBLER Phylloscopus chloronotus	r1	CB, F, H, O, WB	920-3700	1, 2, 5, 6, 7, 8, 10, 11, 14, 19, 20, 21, 23, 24, 25, 26, 27, 29, 30, 32, 33
HUME'S WARBLER Phylloscopus humei	s2	F, H	1800, 3100-3750	3, 7, 23, 26, 31
Yellow-browed Warbler Phylloscopus inornatus	w5	A, WB	770-1100	24
GREENISH WARBLER Phylloscopus trochiloides	s3	F	1700, 3040-3830	5, 23, 31
LARGE-BILLED LEAF WARBLER Phylloscopus magnirostris	s2	CB, F, H, WB	1730-3280	2, 5, 6, 7, 10, 13, 14, 23
BLYTH'S LEAF WARBLER Phylloscopus reguloides	r5s1	CB, F, H, WB	1100-3575	2, 10, 14, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31, 32
YELLOW-VENTED WARBLER Phylloscopus cantator	s?3	WB	800-1840	3, 4, 5, 6, 7, 10, 13, 14, 15, 16, 17, 19, 20, 21, 23, 25, 26, 32
GOLDEN-SPECTACLED WARBLER Seicercus burkii	r?1	CB, F, H, WB	1500-3510	3, 5, 6, 10, 14, 19, 20, 21, 23, 26, 28, 29, 30, 32
WHISTLER'S WARBLER Seicercus whistleri	r?4	WB	1270-2500+	10, 24, 16, 26
GREY-HOODED WARBLER Seicercus xanthoschistos	r3	A, CB, WB	790-2600	4, 10, 11, 20, 21, 23, 24, 25, 26, 27, 30, 32
WHITE-SPECTACLED WARBLER Seicercus affinis	r4	WB	1005-1740	2, 3, 5, 6, 10, 13, 14, 22, 23, 24, 28, 29, 30, 32
GREY-CHEEKED WARBLER Seicercus poliogenys	r3	CB, WB	915-2300	4, 5, 6, 7, 10, 11, 16, 19, 20, 21, 23, 24, 25, 26, 27
CHESTNUT-CROWNED WARBLER Seicercus castaniceps	r2	CB, WB	940-2710	2, 3, 5, 6, 10, 11, 14, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 32
BROAD-BILLED WARBLER Tickellia hodgsoni	r4	CB, WB	1025-2700	7, 10, 13, 14, 15, 16, 21, 23, 24, 28, 29, 30 32
BLACK-FACED WARBLER Abroscopus schisticeps	r3	CB, O, WB	1510-2400	2, 3, 4, 6, 7, 10, 11, 13, 14, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 32
YELLOW-BELLIED WARBLER Abroscopus superciliaris	?5			7
Garrulacinae WHITE-THROATED LAUGHINGTHRUSH Garrular albertularis	r1	CB, F, H, O, W	1700-3600	1, 2, 8, 10, 14, 20, 23, 24, 25, 26, 27, 28, 20, 30, 31, 32, 33
Garrulax albogularis	r2	O, WB	770-2060	29, 30, 31, 32, 33 2, 3, 4, 5, 6, 7, 8, 10, 21, 23, 24, 25, 27,

Lesser Necklaced Laughingthrush Garrulax monileger	r5	WB	950	24
GREATER NECKLACED LAUGHINGTHRUSH	r5	0	1050-2060	5, 24
Garrulax pectoralis STRIATED LAUGHINGTHRUSH Garrulax striatus	r1	CB, WB	990-2780	2, 5, 6, 10, 11, 14, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32
RUFOUS-NECKED LAUGHINGTHRUSH Garrulax ruficollis	r4	A, WB	770-1675	3, 5, 6, 10, 16, 24, 25, 32
RUFOUS-CHINNED LAUGHINGTHRUSH Garrulax rufogularis	r4	WB	1000-1850	6, 14, 22, 23, 24
SPOTTED LAUGHINGTHRUSH Garrulax ocellatus	r3	CB, F, H	2710-3165	1, 2, 3, 4, 5, 6, 8, 14, 23, 26, 30
GREY-SIDED LAUGHINGTHRUSH Garrulax caerulatus	r4	СВ	1930-2365	4, 5, 6, 7, 8, 10, 13, 24, 25, 28
STREAKED LAUGHINGTHRUSH Garrulax lineatus	r3	A, CB, H, WB	1780-2940	5, 14, 23, 24, 30, 32
BLUE-WINGED LAUGHINGTHRUSH Garrulax squamatus	r3	CB, WB	955-1930	11, 16, 19, 20, 21, 24, 26, 27, 29, 30
SCALY LAUGHINGTHRUSH Garrulax subunicolor	r3	Н	1700, 2340, 2940	4, 6, 7, 11, 13, 14, 21, 23, 27, 28, 29, 30, ?31
BLACK-FACED LAUGHINGTHRUSH Garrulax affinis	r1	CB, F, H, WB	1700-3790	2, 3, 5, 7, 10, 11, 19, 21, 23, 24, 29, 30, 31, 32, 33
CHESTNUT-CROWNED LAUGHINGTHRUSH Garrulax erythrocephalus	r2	A, CB, F, H, WB	975-3170	2, 4, 5, 6, 10, 14, 23, 24, 27, 28, 29, 30, 32
RED-FACED LIOCICHLA Liocichla phoenicea	r4	WB	1490-1880	5, 7, 8, 14, 15, 21, 24, 25, 27, 30
Sylviinae				
Timaliini Rusty-cheeked Scimitar Babbler	r3	A, WB	790-1790	2, 4, 5, 6, 7, 10, 13, 14, 21, 23, 25
Pomatorhinus erythrogenys STREAK-BREASTED SCIMITAR BABBLER	r3	CB, WB	1670-2360	3, 4, 5, 6, 7, 10, 13, 19, 20, 23, 24, 25, 26,
Pomatorhinus ruficollis CORAL-BILLED SCIMITAR BABBLER	r4	WB	1270-1920	27, 28, 30, 31, 32 7, 8, 10, 13, 14, 15, 19, 21, 22, 23, 24, 25,
Pomatorhinus ferruginosus SLENDER-BILLED SCIMITAR BABBLER Xiphirhynchus superciliaris	r4	CB, F, H, WB	1700-2940	26 2, 3, 4, 5, 6, 7, 8, 10, 13, 14, 15, 16, 21, 23, 24, 28, 29, 30
SCALY-BREASTED WREN BABBLER Pnoepyga albiventer	r2	CB, H, WB	920-3530	5, 8, 10, 11, 13, 14, 23, 24, 25, 27, 28, 29, 30
PYGMY WREN BABBLER Pnoepyga pusilla	r2	CB, WB	1690-2135	2, 3, 4, 6, 8, 10, 14, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 32
RUFOUS-THROATED WREN BABBLER Spelaeornis caudatus	r4	СВ	1800-2100	2, 3, 4, 5, 8, 9, 10, 13, 14, 15, 16, 17, 19, 20, 21, 25, 28, 29, 30, 32
BAR-WINGED WREN BABBLER Spelaeornis troglodytoides	r5	Н	2960, 2990	2, 3, 4, 5, 6, 8, 9, 10, 21, 29, 30, 32
Spotted Wren Babbler Spelaeornis formosus	r4	CB, WB	1000-2270	4, 5, 7, 8, 9, 10, 13, 14, 15, 16, 23, 26, 32
WEDGE-BILLED WREN BABBLER Sphenocichla humei	r5	WB	1130	24
RUFOUS-CAPPED BABBLER Stachyris ruficeps	r3	CB, WB	1005-2350	5, 6, 7, 10, 14, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32
Golden Babbler Stachyris chrysaea	r3	CB, O, WB	1005-2400	2, 3, 4, 5, 6, 7, 10, 11, 14, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 32
GREY-THROATED BABBLER Stachyris nigriceps	r5	WB	1005	4, 10, 24
Silver-EARED MESIA Leiothrix argentauris	r3	A,WB	1165-1700, 2600?	11?, 24
RED-BILLED LEIOTHRIX Leiothrix lutea	r?2	CB, F, WB	1740-3390	7, 10, 13, 22, 23, 26, 28, 31
CUTIA Cutia nipalensis	r3	CB, O, WB	1570-2300	5, 7, 8, 10, 13, 14, 19, 20, 21, 22, 23, 24, 25, 28, 31, 32
BLACK-HEADED SHRIKE BABBLER Pteruthius rufiventer	r5	СВ	2300-2390	6, 8, 9, 10, 24
WHITE-BROWED SHRIKE BABBLER	r3	CB, WB	940-2300	2, 3, 4, 5, 6, 10, 14, 19, 20, 21, 23, 24, 25, 26, 30, 32
Pteruthius flaviscapis GREEN SHRIKE BABBLER Pteruthius xanthachlarus	r3	CB, F, H	2200-3210	26, 30, 32 2, 3, 10, 23, 24, 25, 28, 29, 30
Pteruthius xanthochlorus BLACK-EARED SHRIKE BABBLER Pteruthius melanotis	r3	CB, O, WB	920-2410	3, 4, 5, 11, 13, 14, 15, 21, 23, 24, 25, 26, 27, 28, 29, 30, 32
RUSTY-FRONTED BARWING Actinodura egertoni	r3	CB, WB	940-2300	3, 4, 10, 11, 13, 14, 19, 20, 21, 22, 23, 24,
Actinoaura egertom HOARY-THROATED BARWING Actinodura nipalensis	r4	СВ, Н	2205-2840	25, 26, 27, 28, 29 2, 3, 6, 13, 14, 15, 16, 22, 24, 25, 29, 30, ?31
Actinoaura mpalensis BLUE-WINGED MINLA	r3	CB, H, WB	950-3010	3, 4, 5, 10, 14, 19, 20, 21, 23, 24, 25, 26, 29
Minla cyanouroptera				

RED-TAILED MINLA Minla ignotincta	r2	CB, F, H, WB	915-3770	4, 5, 6, 7, 10, 11, 13, 14, 19, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31
GOLDEN-BREASTED FULVETTA Alcippe chrysotis	r4	СВ	2000-2700	2, 3, 6, 8, 10, 11, 13, 14, 15, 19, 20, 21, 23, 26, 27, 28, 29, 30, 32
Yellow-throated Fulvetta Alcippe cinerea	lr2	CB, WB	1600-2500	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 32
RUFOUS-WINGED FULVETTA Alcippe castaneceps	r3	CB, O, WB	1005-3170	2, 5, 6, 7, 10, 11, 14, 20, 23, 24, 25, 26, 27, 28, 29, 30, 32
WHITE-BROWED FULVETTA Alcippe vinipectus	r2	CB, F, H	2410-3370	1, 2, 3, 5, 6, 7, 8, 10, 14, 19, 21, 23, 24, 25, 26, 28, 29, 30, 32
Nepal Fulvetta Alcippe nipalensis	r2	CB, O, WB	800-1980	3, 4, 5, 7, 11, 14, 23, 24, 26, 27, 30, 32
RUFOUS SIBIA Heterophasia capistrata	r1	CB, F, H, O, WB	820-3000	10, 14, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33
STRIATED YUHINA Yuhina castaniceps	r3	WB	920-1300	4, 5, 7, 10, 20, 24
WHITE-NAPED YUHINA Yuhina bakeri	r2	CB, WB	1005-2030	3, 4, 5, 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 21, 23, 24, 25, 26, 27, 30, 32
WHISKERED YUHINA Yuhina flavicollis	r1	CB, F, H, WB	935-2965	1, 5, 10, 12, 14, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 33
STRIPE-THROATED YUHINA Yuhina gularis	r1	CB, F, H, O, WB	(830-) 1550- 3340	1, 4, 5, 6, 7, 10, 11, 14, 21, 23, 24, 25, 27, 28, 29, 30, 32, 33
RUFOUS-VENTED YUHINA Yuhina occipitalis	r2	CB, F, H, O, WB	(960-) 1580- 3590	2, 3, 5, 6, 7, 10, 11, 14, 19, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32
BLACK-CHINNED YUHINA Yuhina nigrimenta	r3	WB	935-1870	4, 5, 10, 11, 13, 14, 23, 24, 26, 27, 30, 32
WHITE-BELLIED YUHINA Yuhina zantholeuca	r3	WB	1100-1800	4, 13, 24, 25
FIRE-TAILED MYZORNIS Myzornis pyrrhoura	r3	CB	1800-2900	2, 3, 5, 8, 10, 11, 13, 22, 24, 27, 29, 32
GREAT PARROTBILL Conostoma oemodium	r5	F	3235	8, 23
BROWN PARROTBILL Paradoxornis unicolor	r4	F	3200-3220	1, 23
GREY-HEADED PARROTBILL Paradoxornis gularis	r5		1500	14
BLACK-THROATED PARROTBILL Paradoxornis nipalensis	r3	CB, H	1800-2940	4, 6, 7, 10, 13, 14, 15, 23, 24, 26, 28, 29, 30, 31
GREATER RUFOUS-HEADED PARROTBILL Paradoxornis ruficeps	lr2	WB	1825-1930	4, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 22, 23, 24 sp., 25, 26, 27, 29, 32
Alaudidae Oriental Skylark Alauda gulgula	r3	А	3050-3510	1, 4, 5, 8, 10, 13, 14, 19, 23, 24, 30, 33
Nectariniidae Nectariniinae				
Dicaeini Yellow-Bellied Flowerpecker	r5		1800, 2700	10, 13, 15
Dicaeum melanoxanthum FIRE-BREASTED FLOWERPECKER Dicaeum ignipectus	r2	CB, F, H, O, WB	890-2850	1, 2, 4, 5, 10, 11, 14, 21, 23, 24, 25, 26, 27, 29, 30, 32
Nectariniini	22		1700 2100	
Mrs Gould's Sunbird Aethopyga gouldiae	r?3	CB, H, WB	1790-3100	1, 2, 3, 5, 6, 7, 10, 11, 14, 19, 20, 23, 25, 28, 29, 30, 31, 32, 33
GREEN-TAILED SUNBIRD Aethopyga nipalensis	r2	CB, F, H, WB	950-3620	8, 10, 11, 14, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32
BLACK-THROATED SUNBIRD Aethopyga saturata	r2	CB, WB	790-2135	2, 3, 5, 6, 7, 10, 14, 19, 21, 23, 24, 25, 26, 29, 30
CRIMSON SUNBIRD Aethopyga siparaja	r5	WB	1690	24
FIRE-TAILED SUNBIRD Aethopyga ignicauda	r3	F, WB	1495-3700	1, 4, 5, 8, 10, 16, 23, 24, 25, 28, 29, 30, 31, 33
STREAKED SPIDERHUNTER Arachnothera magna	r3	WB	770-1930	3, 4, 7, 10, 14, 19, 20, 21, 22, 23, 24, 30
Passeridae Passerinae				
RUSSET SPARROW Passer rutilans	r3	А	1675-3130	1, 10, 14, 21, 23, 24, 25, 26, 30
Eurasian Tree Sparrow Passer montanus	r3	А	790-3130	10, 14, 23, 24
Motacillinae				
WHITE WAGTAIL Motacilla alba	rwm3	A, W	770-3130	23, 24, 30, 32
CITRINE WAGTAIL Motacilla citreola	m5			1
GREY WAGTAIL Motacilla cinerea	r4	F, H, W, WB	1265-3510	3, 5, 6, 10, 14, 20, 23, 24

Olive-backed Pipit Anthus hodgsoni	r2	A, CB, F, H, WB	790-3880	2, 10, 14, 19, 21, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33
Rosy PIPIT Anthus roseatus	s5	А	3300-3880	23, 30, 32
Prunellinae				
ALPINE ACCENTOR Prunella collaris	r5		2800-3450	6, 8, 16, 23, 29
ALTAI ACCENTOR Prunella himalayana	w5	Н	2935	8, 24
ROBIN ACCENTOR Prunella rubeculoides	?5			4, 8
Rufous-breasted Accentor Prunella strophiata	r3	A, CB, F, H, WB	1650-3400	5, 10, 11, 23, 24, 27, 29, 30
MAROON-BACKED ACCENTOR Prunella immaculata Estrildinae	?5	СВ	2280	23, 30, 32
SSIFIIGINAE WHITE-RUMPED MUNIA Lonchura striata	r3	A, WB	790-1470	8, 24
Scaly-breasted Munia Lonchura punctulata	r3	A, WB	790-1100	24
Fringillidae				
Fringillinae				
Carduelini				
Larduelini Vellow-breasted Greenfinch Carduelis spinoides	r2	A	950-1980	3, 5, 6, 19, 20, 21, 23, 24, 26
TIBETAN SISKIN Carduelis thibetana	r4	F, WB	1100-3510	4, 5, 13, 23, 24
PLAIN MOUNTAIN FINCH	r3	А	3100-3120	1, 3, 4, 14, 23, 24, 30
Dark-breasted Rosefinch Carpodacus nipalensis	r4	WB	1700-1800	8, 11, 24, 27, 30, 32
Common Rosefinch Carpodacus erythrinus	r4	F, H, A	950-3180	23, 24, 26, 28, 32
BEAUTIFUL ROSEFINCH Carpodacus pulcherrimus	r3	А	3100	15, 19, 21, 24
Dark-rumped Rosefinch Carpodacus edwardsii	r4	CB, F	2780-3220	2, 7, 8, 15, 23, 24, 29, 30
WHITE-BROWED ROSEFINCH Carpodacus thura	?5			5, 15
BTREAKED ROSEFINCH Carpodacus rubicilloides	?5	WD	3200	29
CRIMSON-BROWED FINCH Propyrrhula subhimachala	r4	WB	1770, 2500, 2700	2, 3, 5, 6, 8, 11, 13, 15, 23, 27, 30
Scarlet Finch Haematospiza sipahi	r3	CB, WB	1700-2180	3, 5, 6, 7, 8, 10, 11, 14, 20, 24, 26, 27, 28 29, 32, 33
Red CrossBill Loxia curvirostra	r3	F, H	2960-3550	3, 5, 7, 14, 19, 21, 23, 24, 30
BROWN BULLFINCH Pyrrhula nipalensis	r4			4, 8, 20, 28, 30
Red-headed Bullfinch Pyrrhula erythrocephala	r3	F, H, WB	1660, 3170	1, 3, 5, 6, 8, 10, 11, 14, 19, 21, 23, 24, 29 30
Grey-headed Bullfinch Pyrrhula erythaca	?5	CB	2700	8, 14
Collared Grosbeak Aycerobas affinis	r?4	F	3100-3670	1, 5, 6, 8, 10, 14, 23, 26, 30
BPOT-WINGED GROSBEAK Mycerobas melanozanthos	r4	WB	1360-1770	2, 4, 5, 8, 24, 27, 33
WHITE-WINGED GROSBEAK Mycerobas carnipes	r3	F	3140-3950	1, 3, 5, 8, 12, 13, 23, 24, 25, 30
Gold-NAPED FINCH Pyrrhoplectes epauletta	r4		1850-2300	4, 8, 11, 13, 27, 29, 30
Emberizinae Crested Bunting Malaphus lathami	r4	А	830-1100	16, 24, 25, 32
Melophus lathami LITTLE BUNTING Emberiza pusilla	w4	A	950-2240	23, 24

Key to checklist

Bold type indicates species recorded in the core area of the park; the other species were recorded only in the buffer zone.

resident r

summer visitor s

winter visitor w

m passage migrant

? status uncertain

1 locally common fairly common

1

2 3 frequent

4 uncommon

5

rare

W Wetlands

Fir forest

Habitats:

F

Η

Α

WB Warm broadleaved forest

CB Cool broadleaved forest

Hemlock/rhododendron forest

Agriculture/pasture/around habitation