A checklist of the birds of Jammu @ Kashmir, India

Muzaffar A Kichloo, Neeraj Sharma, Intesar Suhail, Parvaiz Shagoo & Parmil Kumar

Kichloo, A. M., Sharma, N., Suhail, I., Shagoo & P., Kumar, P., 2024. A checklist of the birds of Jammu & Kashmir, India. Indian BIRDS 19 (6): 163–180.

Muzaffar A. Kichloo, Department of Environmental Sciences, Government Degree College, Thathri, Jammu & Kashmir, India. Email: omar.mzfr@gmail.com. [Corresponding author]

Neeraj Sharma, Institute of Mountain Environment, Bhaderwah Campus, University of Jammu, Jammu & Kashmir, India. Email: nirazsharma@gmail.com. Intesar Suhail, Wildlife Warden, Department of Wildlife Protection, Jammu & Kashmir, India. Email: intesar.suhail@gmail.com.

Parvaiz Shagoo, Range Officer, O/o Principal Chief Conservator of Forests, Jammu & Kashmir, India. Email: parvaizshagoo@gmail.com.

Parmil Kumar, Department of Statistics, University of Jammu, Jammu & Kashmir. Email: parmil@yahoo.com.

Manuscript received on 28 July 2023.

Abstract

A checklist is the fundamental metric of the biodiversity of an area. This paper presents a comprehensive checklist of bird species found in Jammu & Kashmir, India, based on a meticulous collation of ornithological literature, specimen collections, online and published sources with photographic evidence, call recordings, and sight documentation supported by detailed field notes. Jammu & Kashmir has 592 species of birds belonging to 21 orders and 88 families. Of these, 326 species have been included in the checklist based on museum specimens, 555 based on media and six species. drawn from well-documented sight records. Seven species reported from Jammu & Kashmir are endemic to western Himalaya. Twenty-five species are classified as globally threatened by the IUCN Red List of Threatened Species. Additional unconfirmed records are also discussed in Appendix A.

he Union Territory of Jammu & Kashmir of India is located between 32.30°N to 35.12°N and 73.40°E to 76.80°E in the northwestern part of the Himalayan Mountain range (Fig. 1). It covers an area of 55,538 sq. km, with elevation ranging from 247 m to 7,135 m asl. It shares borders with the Union Territory of Ladakh to the north and east, and Pakistan to the west. To the south, it is adjacent to the Indian states of Punjab and Himachal Pradesh. Jammu & Kashmir is administratively divided into two divisions: Jammu and Kashmir. The southern alluvial plains of Jammu, which are part of the Indo-Gangetic plains, give rise to the Shiwaliks, hill range of moderate elevation. In the northern region, the Pir-Panjal range, part of the lesser Himalaya, separates the intermontane Valley of Kashmir from the hilly Jammu region. The Great Himalaya (Zanskar range) to the north and northwest separate Kishtwar (in Jammu) and the Valley of Kashmir from Ladakh.

The distinct topography of the region, characterized by snowcapped mountains, lush green forests, extensive drainage, and complex geological formations, contributes to the rich biodiversity of Jammu & Kashmir. Characterized by a diverse set of physical features, the region lies at the intersection of two bio-geographic regions of the world, the Palearctic and the Oriental, resulting in a rich mix of fauna and avian diversity (Roberts 1991). Sharing 39% of the total geographical area, the forests in Jammu & Kashmir belong to six major groups that include tropical dry deciduous, subtropical pine, subtropical dry evergreen, Himalayan moist temperate, Himalayan dry temperate, and sub-alpine forests (ISFR 2021). Human-modified habitats include farmlands, cash croplands, urban forests, parks, and gardens. Jammu & Kashmir has a vast protected area network comprising four national parks, 14 wildlife sanctuaries, 16 conservation reserves, and 16 wetland reserves, including five Ramsar sites, accounting for 11.31% of the total area coverage (J&K Department of Wildlife Protection, 2023). Jammu & Kashmir lies in the West Himalayan Endemic Bird Area, EBA 128 (Rahmani et al. 2012), and it has 11 Restricted Range species (Stattersfield et al. 1998). The region is

a migratory corridor for Central Asian and Eastern European birds to enter India, passing through Iran, Afghanistan, and Pakistan (Ali & Ripley 1987).

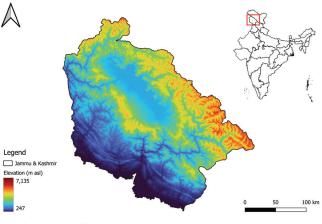


Fig 1. Elevation map and location of Jammu & Kashmir.

Ornithological History of Jammu & Kashmir

The geopolitical entity of Jammu & Kashmir was established in 1846 after the British handed over the state to Maharaja Gulab Singh (Britannica 2023). The princely state, comprising modern-day Jammu & Kashmir and Ladakh, acceded to India in 1947 and was reorganized in the present political form in 2019 (Ministry of Home Affairs 2019). The historical accounts of ornithology in the state dates back to the British era with observation-based preliminary descriptions by Theobald (1854) and Adams (1859). In 1871 Brooks (Brooks 1872) pioneered detailed investigations on the birds of Kashmir. Biddulph (1881, 1882) and Scully (1881) collected birds from Gilgit, which is in Ladakh now, and beyond the scope of this checklist. Cordeaux (1888, 1894) conducted intensive avian surveys in Kashmir, and Lawrence (1895) published the first checklist of the birds of the Valley of Kashmir. A comprehensive account of avian distribution in Jammu & Kashmir was, however, first presented by Ward (1906a,b; 1907a,b; 1908). During the 1920s, Baker (1924) published a handlist that included birds from the Kashmir valley and the plains of Jammu.

Towards the end of the twentieth century, additions to the ornithological literature in Jammu & Kashmir was made by Mitchell (1911), Magrath (1912, 1921), Oliver (1919), Whistler (1922, 1932, 1936), Bates (1923, 1936), Osmaston (1923, 1927a,b, 1930), Ward (1923), Koul (1930,1939), Beresford (1944), Bates & Lowther (1952), Ripley (1952), Pandit (1982), Shah (1984), and Ali & Ripley (1987), to mention the most prominent.

Interestingly, the areas that remained unexplored for a long time have lately emerged as the top birdwatching destinations in Jammu & Kashmir (https://ebird.org/india/region/IN-JK/ hotspots). These include the north and central Kashmir Valley, the Shiwaliks and parts of the Lesser Himalaya, and the southern plains of Jammu Division. With the publication of field guides and the increasing availability of bird-watching equipments such as cameras and binoculars, there has been a significant surge in avifaunal observations. This heightened interest can be attributed, in part, to the emergence of a new generation of Indian bird enthusiasts. Furthermore, the introduction of the eBird platform in India has spurred the interest of local birders, ornithologists, and naturalists, who are now exploring potential birding sites across various regions of Jammu & Kashmir.

Recently, Suhail et al. (2020) published the first comprehensive checklist of 555 birds belonging to 20 orders and 76 families for Jammu, Kashmir, and Ladakh combined. The list is exclusively based on published records and web sources and compiled information up to 2017. Here we compile an extended checklist of birds of Jammu & Kashmir, covering the territorial limits defined by the Government of India (Ministry of Home Affairs 2019), which does not include Ladakh.

Methodology

Bird records from Jammu & Kashmir were evaluated and accepted following the recommendations of Praveen et al. (2013). To be accepted, a species had to meet at least one of the following four criteria, i.e., a museum specimen, a media record, an unpreserved specimen, or a well-documented sight record. The museum specimen, confirmed by competent taxonomists, was the most preferred criterion. The media record included a photograph or a call record, available in the public domain as a published record or a web source. The unpreserved specimens included only those duly validated by the knowledgeable field workers, while the sight records relied on the degree of documentation provided by the observers. We exercised caution while accepting species supported solely by evidence of egg collection unless accompanied with detailed notes, media evidence, or specimens.

Our checklist follows the taxonomic order and species limits defined by Praveen & Jayapal (2024). All the species reported from Jammu & Kashmir till 31 January 2024 have been documented in the checklist. This checklist does not include species considered provisional, unconfirmed, introduced, or escapees.

Specimens

Ferdinand Stoliczka is known to have started documenting

birds through specimen collection in the northwest Himalaya, and his collections from Kashmir were later deposited in the Indian Museum, Kolkata. This was followed by W. E. Brooks, who pioneered documenting birds from Kashmir in the early summer of 1871, and the collections from the first Yarkand expedition in 1870 (Henderson & Hume 1873), the majority of which are now housed in the Natural History Museum, London (NHMUK). Ward (1906a,b; 1907a,b; 1908) compiled a comprehensive checklist of birds based on both the sight records and specimen collections, most of which had been deposited in the Sri Pratap Singh (SPS) Museum, Srinagar. Later, W. L. Abbott made a collection of 746 bird specimens belonging to 188 species, which were deposited in the National Museum of Natural History (United States National Museum, USNM) (Richmond 1895). We did not track down the actual specimens but relied on the authenticity of the references, which, however, were examined and cross-checked.

The specimen records were supplemented with relevant records from Global Biodiversity Information Facility (GBIF), catalogues of BNHS (Abdulali 1968, 1969a,b,c, 1970a,b, 1971, 1972, 1974, 1976, 1981, 1985, 1986a,b) and NHMUK (Sharpe 1879, 1883; Seebohm 1881; Sclater & Shelly 1891; Ogilvie-Grant 1893; Salvin 1896), USNM (Richmond 1895), and online catalogues of different museums across the world available via Vertnet (http://portal.vertnet.org/). Excluding specimen records on GBIF, the details of all other specimens have been provided as supplementary information on Zenodo (https://doi.org/10.5281/zenodo.10401432).

Photographs and audio recordings

The collection of bird images has emerged as a significant and extensive ornithological database for the current checklist. Over the years, bird photography has rapidly evolved in Jammu & Kashmir, thanks to the contributions made by bird watchers, hobbyists, researchers, and ornithologists. Various repositories were consulted for this purpose, including eBird (https://ebird. org/india/region/IN-JK?yr=all), where the images are archived in the Macaulay Library's website (https://www.macaulaylibrary. org/). Additionally, web resources such as social media groups like KASHMIR BIRDWATCH (https://www.facebook.com/groups/ kashmirbirdwatch/), J&K Birdlife (https://www.facebook.com/ groups/1523659814595773/), and Birds of Kashmir (https:// www.facebook.com/groups/677355303015834) were utilized, along with personal collections from social media accounts. The image database also incorporated published field guides, books, magazines, newsletters, and journals, which underwent careful examination and scrutiny. Most local and non-local birders are focused on photography, and hence the practice of recording bird calls has not yet become popular in the area. Nevertheless, 204 species' calls have been shared and uploaded to platforms such as eBird and Xeno Canto (http://www.xenocanto.org).

A significant effort was made to consolidate and centralize all media records from these scattered sources onto a single platform, eBird. This was achieved, by requesting individual birdwatchers to upload their sightings to eBird and collectively uploading rare sightings through a group account. eBird was chosen due to its increasing popularity among the birding community of Jammu & Kashmir and the easy access to Macaulay Library. To ensure data accuracy and reliability, only those eBird records that successfully underwent scrutiny by the regional eBird editors and data reviewers specialized in the Jammu & Kashmir region were accepted. All selected records have been meticulously examined and validated through the eBird review process, which entails rigorous data quality control measures. Furthermore, it is noteworthy that the accepted records are publicly accessible, reinforcing the reliability and traceability of the data compilation process.

Sight records

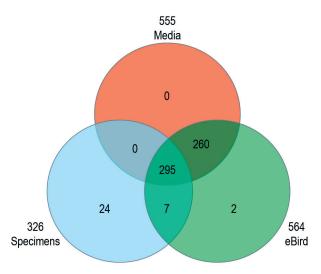
Assessing sight records proved to be an immense undertaking due to the scattered nature of the records across various sources, ranging from published articles to travelogues. To search for published literature on birds in Jammu & Kashmir, we utilized the online Bibliography of South Asian Ornithology (Pittie 2023). Following the guidelines set by Praveen et al. (2016), we adopted a cautious approach when considering including sight records. Published records were thoroughly examined to determine their accuracy, and those lacking sufficient details or validation were excluded from the checklist (details in Appendix A).

Establishing threat & conservation status

The International Union for Conservation of Nature (IUCN) produces The IUCN Red List of Threatened Species, the world's most comprehensive inventory of species classified based on the level of extinction threat to the species. In this checklist, the species have been marked under Threatened and Near Threatened categories as per the IUCN Red List of Threatened Species (Version 2023-1) (IUCN 2024) as well as Schedule-I of the Indian Wild Life (Protection) Amendment Act, 2022. Besides, the State of India's Birds report (SoIB 2023) classifies bird species into three categories of Conservation Priority for India: High Priority, Moderate Priority, and Low Priority. Bird species of 'High' Conservation Priority found in Jammu & Kashmir have also been marked.

Results

We report 592 species in 21 orders and 88 families, of which 555 are supported with media documentation, 326 have been either examined in hand or deposited in museums across the world, and six species (Table 1) have been accepted based solely



on documentation considered credible. 586 species have been validated either through specimens or photographs, and 564 species are listed on eBird, accounting for 95% of all the birds reported from Jammu & Kashmir. A summary of the source of records is provided in Fig. 2. Out of the total 592 species, 25 are globally threatened. Below, we present our evaluation notes for six species accepted based solely on documentation. A second list (Appendix A) includes species that were not admitted into the checklist based on the criteria set above.

Species accepted solely on documentation Hill Partridge *Arborophila torqueola*

Ward (1907b, 1923) reported this bird to be found in Kishtwar, Bhaderwah, and Poonch but never procured a specimen. Sharma & Rana (2017) heard the plaintive calls of this bird near a water channel below Guldanda, Bhaderwah, for 3 minutes, which they distinguished from other partridges and birds by its distinctive smooth, mournful whistle. The bird is found in the adjoining region (Chamba District) of Himachal Pradesh, where it has been photographed (Khaira 2018; Sagar & Thapar 2021). Although this may not be a typical sight record, we accept this species based on the detailed documentation of its distinctive call from Bhaderwah.

Blyth's Swift Apus leuconyx

No media or specimen records are available for Blyth's Swift, but it has been observed multiple times in different parts of Jammu & Kashmir. The earliest recorded mention was by Ward (1907a), although Lawrence (1895) suggests the likelihood of its occurrence in Kashmir. Osmaston (1927b) noted occasional sightings of the bird in flight at higher elevations along the Great Himalayan Range. Price & Jamdar (1990) reported a sighting from Overa Wildlife Sanctuary in Kashmir, while Awan et al. (2010, 2012) reported sightings from Muzaffarabad. On their map, Grimmett et al. (2011) included Jammu & Kashmir in the bird's summer range. More recently, it was recorded from Aru Valley (above Mondlan) in Anantnag on 24 July 2022 (Eaton et al. 2022).

Eurasian Oystercatcher Haematopus ostralegus

Ward (1907b) mentioned its sighting near Wular Lake. Grimmett et al. (2011) and Rasmussen & Anderton (2012) mentioned Kashmir in its passage migration. Since it is an unmistakable bird regarding identification, we accept it in the checklist based on the latter two authorities.

Sociable Lapwing Vanellus gregarius

Ward (1907b) stated, 'The Sociable Lapwing now and again can be obtained' suggesting that specimens of this bird can be secured. Ali & Ripley (1987) describe it as an occasional winter visitor to Kashmir. Grimmett et al. (2011) also include it in their map of Kashmir, whereas it is not explicitly mentioned for Jammu & Kashmir in Rasmussen & Anderton (2012). We accept this record based on the first three references.

Pallid Harrier Circus macrourus

Osmaston (1927b) mentioned Pallid Harrier (and Hen Harrier *C. cyaneus*) as 'often be seen during the autumn, winter and early spring months quartering the ground in the valley'. Naoroji (2006), Grimmett et al. (2011), and Rasmussen & Anderton

Fig 2. Sources of records

(2012) map the species as passage migrant through Jammu & Kashmir. We accept the species for Jammu & Kashmir based on all these authorities.

Rufous-vented Tit Periparus rubidiventris

Rufous-vented Tit has a distribution extending through most of the Himalaya from Northeast India, extending westwards to the Western Himalaya (Gosler & Clement 2020). Grimmett et al. (2011) included Jammu & Kashmir in its range, whereas Rasmussen & Anderton (2012) excluded Jammu & Kashmir, stating that the distribution only extends westwards to Uttarakhand and that the species has "strayed to Shimla" (in Himachal Pradesh). A specimen supposedly exists in Yale Peabody Museum from Kashmir Valley (YPM ORN 011474) but it has not been examined by us. Since Rasmussen & Anderton (2012) doesn't include Jammu & Kashmir in the range and have extensively sampled specimens in this museum, it is possible that the specimen has been misidentified or mislabeled and may have belonged to Rufous-naped Tit P. rufonuchalis, as both were once treated conspecific. However, in Overa Aru Wildlife Sanctuary, Jammu & Kashmir, Jamdar & Price (1990) successfully captured a pair of tits displaying an extensive rufous coloration on their underparts. Based on their observations, they confidently identified them as Rufous-vented Tit. They also measured the specimens and found that they were slightly smaller than Rufous-naped Tit. The distinctiveness of

Table 1. Checklist of the birds of Jammu & Kashmir

S. No.	Family & Species	S	М
	I. Anseriformes		
	1. Anatidae (Ducks, Geese, and Waterfowls)		
1	Lesser Whistling-Duck Dendrocygna javanica		М
2	Bar-headed Goose Anser indicus	Ν	М
3	Greylag Goose Anser anser	В	М
4	Greater White-fronted Goose Anser albifrons	0	М
5	Lesser White-fronted Goose Anser erythropus VU	0	М
6	Tundra Bean-Goose Anser serrirostris		М
7	Tundra Swan Cygnus columbianus		М
8	Whooper Swan Cygnus cygnus*	0	
9	Knob-billed Duck Sarkidiornis melanotos		М
10	Ruddy Shelduck Tadorna ferruginea H	G	М
11	Common Shelduck Tadorna tadorna		М
12	Cotton Pygmy-Goose Nettapus coromandelianus S	G	М
13	Baikal Teal Sibirionetta formosa*	0	
14	Garganey Spatula querquedula H		М
15	Northern Shoveler Spatula clypeata H	В	М
16	Gadwall Mareca Strepera		М
17	Falcated Duck Mareca falcata NT		М
18	Eurasian Wigeon Mareca penelope		М
19	Indian Spot-billed Duck Anas poecilorhyncha	0	М
20	Mallard Anas platyrhynchos	0	М

the extensive rufous coloration on the underparts, coupled with the authors' expertise, eliminated any doubt regarding the identification.

Conservation dependent species

Jammu & Kashmir has 25 species that fall under threatened categories of the IUCN Red List of Threatened Species (IUCN 2024). Among these, two species (Sociable Lapwing and Whiterumped Vulture) Gyps bengalensis are classified as Critically Endangered (CR), six species are Endangered (EN), and 17 species are Vulnerable (VU). An additional 25 species are listed as Near Threatened (NT). Seventy-five species fall under Schedule – I of the Indian Wild Life (Protection) Amendment Act, 2022, of which two are CR, six EN, 12 VU, 10 NT, and 45 species are Least Concern (LC). Eighty-five species are of High Conservation Priority in Jammu & Kashmir as per SoIB (2023).

Endemism

Seven species reported from Jammu & Kashmir are endemic to western Himalaya (Praveen & Jayapal 2024). These include Western Tragopan, Cheer Pheasant, White-throated Tit, Kashmir Nuthatch, White-cheeked Nuthatch, Orange Bullfinch, and Spectacled Finch. Additionally, the *biddulphi* subspecies of the Tawny Owl *Strix aluco*, endemic to the western Himalaya, is also found here. Furthermore, the Kashmir Flycatcher *Ficedula subrubra*, is known to breed only in the Kashmir Valley.

S. No.	Family & Species	S	М
21	Northern Pintail Anas acuta H		М
22	Common Teal Anas crecca H	G	М
23	Marbled Duck Marmaronetta angustirostris* NT, S, H	Ν	
24	Red-crested Pochard Netta rufina		М
25	Common Pochard Aythya ferina VU, S, H		М
26	Ferruginous Duck Aythya nyroca NT	G	М
27	Tufted Duck Aythya fuligula H	Ν	М
28	Greater Scaup Aythya marila*	0	
29	Long-tailed Duck Clangula hyemalis VU	0	М
30	Common Goldeneye Bucephala clangula	0	М
31	Smew Mergellus albellus	0	М
32	Common Merganser Mergus merganser H	0	М
33	White-headed Duck Oxyura leucocephala* EN, S	0	
	II. Galliformes		
	2. Phasianidae (Pheasants, Grouse and Allies)		
34	Hill Partridge Arborophila torqueola		
35	Snow Partridge Lerwa lerwa	G	
36	Western Tragopan <i>Tragopan melanocephalus</i> VU, S, H	G	М
37	Himalayan Monal Lophophorus impejanus S	G	М
38	Koklass Pheasant Pucrasia macrolopha	G	М
39	Cheer Pheasant Catreus wallichii VU, S, H		М
40	Kalij Pheasant Lophura leucomelanos S	Ν	М

Ē

S. No.	Family & Species	S	М
41	Indian Peafowl Pavo cristatus S		М
42	Red Junglefowl Gallus gallus		М
43	Grey Francolin Ortygornis pondicerianus	G	М
44	Black Francolin Francolinus francolinus	G	М
45	Himalayan Snowcock Tetraogallus himalayensis	G	М
46	Blue-breasted Quail Synoicus chinensis*	G	
47	Common Quail Coturnix coturnix	0	М
48	Chukar Partridge Alectoris chukar	G	М
49	Jungle Bush-Quail Perdicula asiatica	G	М
	III. Podicipediformes		
	3. Podicipedidae (Grebes)		
50	Little Grebe Tachybaptus ruficollis	G	М
51	Horned Grebe Podiceps auritus VU		М
52	Great Crested Grebe Podiceps cristatus H	0	М
53	Black-necked Grebe Podiceps nigricollis		М
	IV. Columbiformes		
	4. Columbidae (Pigeons and Doves)		
54	Rock Pigeon Columba livia	Ν	М
55	Hill Pigeon Columba rupestris*	Ν	
56	Snow Pigeon Columba leuconota	G	М
57	Common Wood-Pigeon Columba palumbus	Ν	М
58	Speckled Wood-Pigeon Columba hodgsonii	G	М
59	Oriental Turtle-Dove Streptopelia orientalis	G	М
60	Eurasian Collared-Dove Streptopelia decaocto	G	М
61	Red Collared-Dove Streptopelia tranquebarica	U	М
62	Spotted Dove Spilopelia chinensis	В	М
63	Laughing Dove Spilopelia senegalensis		М
64	Asian Emerald Dove Chalcophaps indica		М
65	Yellow-footed Green-Pigeon Treron phoenicopterus		М
66	Wedge-tailed Green-Pigeon Treron sphenurus	Ν	М
	V. Pterocliformes		
	5. Pteroclidae (Sandgrouse)		
67	Chestnut-bellied Sandgrouse Pterocles exustus	0	М
	VI. Otidiformes		
	6. Otididae (Bustards)		
68	Macqueen's Bustard Chlamydotis macqueenii* VU, S, H	0	
69	Little Bustard <i>Tetrax tetrax*</i> NT, S	В	
	VII. Cuculiformes		
	7. Cuculidae (Cuckoos)		
70	Greater Coucal Centropus sinensis	G	М
71	Sirkeer Malkoha Taccocua leschenaultii H		М
72	Pied Cuckoo Clamator jacobinus	G	М
73	Asian Koel Eudynamys scolopaceus	G	М
74	Banded Bay Cuckoo Cacomantis sonneratii*	0	

S. No.	Family & Species	S	М
75	Grey-bellied Cuckoo Cacomantis passerinus		М
76	Square-tailed Drongo-Cuckoo Surniculus lugubris		М
77	Common Hawk-Cuckoo Hierococcyx varius		М
78	Lesser Cuckoo Cuculus poliocephalus	G	М
79	Indian Cuckoo Cuculus micropterus		М
80	Himalayan Cuckoo Cuculus saturatus	0	М
81	Common Cuckoo Cuculus canorus	G	М
	VIII. Caprimulgiformes		
	8. Caprimulgidae (Nightjars and Allies)		
82	Jungle Nightjar Caprimulgus indicus		М
83	Grey Nightjar Caprimulgus jotaka		М
84	Sykes's Nightjar Caprimulgus mahrattensis		М
85	Large-tailed Nightjar Caprimulgus macrurus		М
86	Savanna Nightjar Caprimulgus affinis		М
	9. Apodidae (Swifts)		
87	White-throated Needletail Hirundapus caudacutus	Ν	
88	Alpine Swift Tachymarptis melba	Ν	М
89	Common Swift Apus apus	G	М
90	Blyth's Swift Apus leuconyx		
91	Little Swift Apus affinis	G	М
	IX. Gruiformes		
	10. Rallidae (Rails, Gallinules, and Coots)		
92	Water Rail Rallus aquaticus	G	М
93	Spotted Crake Porzana porzana		М
94	Common Moorhen Gallinula chloropus	G	М
95	Eurasian Coot Fulica atra	U	М
96	Grey-headed Swamphen Porphyrio poliocephalus	0	М
97	White-breasted Waterhen Amaurornis phoenicurus	G	М
98	Ruddy-breasted Crake Zapornia fusca	G	М
99	Brown Crake Zapornia akool	Ν	М
100	Baillon's Crake Zapornia pusilla	G	М
	11. Gruidae (Cranes)		
101	Demoiselle Crane Grus virgo S, H		М
102	Sarus Crane Antigone antigone VU, S, H	G	М
103	Common Crane <i>Grus grus</i> S, H		М
	X. Charadriiformes		
	12. Burhinidae (Thick-knees)		
104	Great Thick-knee Esacus recurvirostris NT, H		М
105	Indian Thick-knee Burhinus indicus		М
	13. Recurvirostridae (Stilts and Avocets)		
106	Black-winged Stilt Himantopus himantopus		М
107	Pied Avocet Recurvirostra avosetta H		М
	14. Ibidorhynchidae (Ibisbill)		
108	Ibisbill <i>Ibidorhyncha struthersii</i> S	G	М

S. No.	Family & Species	S	М
	15. Haematopodidae (Oystercatchers)		
109	Eurasian Oystercatcher Haematopus ostralegus* NT, H		
	16. Charadriidae (Plovers and Lapwings)		
110	Grey Plover Pluvialis squatarola H		М
111	Pacific Golden-Plover Pluvialis fulva S		М
112	Little Ringed Plover Charadrius dubius H	G	М
113	Northern Lapwing Vanellus vanellus NT	G	М
114	River Lapwing Vanellus duvaucelii NT		М
115	Yellow-wattled Lapwing Vanellus malabaricus		М
116	Red-wattled Lapwing Vanellus indicus	G	М
117	Sociable Lapwing Vanellus gregarious* CR, S, H		
118	White-tailed Lapwing Vanellus leucurus		М
119	Caspian Plover Anarhynchus asiaticus		М
120	Tibetan Sand-Plover Anarhynchus atrifrons H		М
121	Kentish Plover Anarhynchus alexandrinus H		М
	17. Rostratulidae (Painted-snipes)		
122	Greater Painted-Snipe Rostratula benghalensis	G	М
	18. Jacanidae (Jacanas)		
123	Pheasant-tailed Jacana Hydrophasianus chirurgus	G	М
	19. Scolopacidae (Sandpipers and Allies)		
124	Whimbrel Numenius phaeopus	0	М
125	Eurasian Curlew Numenius arquata NT, H		М
126	Black-tailed Godwit Limosa limosa NT, H		М
127	Jack Snipe Lymnocryptes minimus		М
128	Eurasian Woodcock Scolopax rusticola	0	М
129	Solitary Snipe Gallinago solitaria	G	М
130	Pin-tailed Snipe Gallinago stenura H		М
131	Common Snipe Gallinago gallinago	G	М
132	Red-necked Phalarope Phalaropus lobatus		М
133	Terek Sandpiper Xenus cinereus H	G	М
134	Common Sandpiper Actitis hypoleucos	G	М
135	Green Sandpiper Tringa ochropus	G	М
136	Marsh Sandpiper Tringa stagnatilis H		М
137	Wood Sandpiper Tringa glareola		М
138	Common Redshank Tringa totanus H		М
139	Spotted Redshank Tringa erythropus H	0	М
140	Common Greenshank Tringa nebularia S, H		М
141	Ruddy Turnstone Arenaria interpres		М
142	Ruff <i>Calidris pugnax</i> H	Ν	М
143	Broad-billed Sandpiper Calidris falcinellus		М
144	Sharp-tailed Sandpiper Calidris acuminata VU		М
145	Curlew Sandpiper Calidris ferruginea NT, H		М
146	Temminck's Stint Calidris temminckii	Ν	М
147	Sanderling <i>Calidris alba*</i> H	G	

S. No.	Family & Species	S	М
148	Dunlin <i>Calidris alpina</i> H	5	M
149	Little Stint <i>Calidris minuta</i> H		M
T	20. Turnicidae (Buttonguails)		IVI
150	Barred Buttonquail <i>Turnix suscitator</i>		М
150	21. Glareolidae (Pratincoles and Coursers)		101
151	Small Pratincole <i>Glareola lactea</i>		М
152	Oriental Pratincole Glareola maldivarum		M
152	22. Laridae (Gulls, Terns, and Skimmers)		141
153	Black-headed Gull Chroicocephalus ridibundus H	N	М
154	Brown-headed Gull Chroicocephalus brunnicephalus H	G	M
155	Pallas's Gull Ichthyaetus ichthyaetus	N	M
156	Mew Gull Larus canus		M
157	Caspian Gull Larus cachinnans		M
158	Lesser Black-backed Gull Larus fuscus		M
159	Little Tern Sternula albifrons H		M
160	Gull-billed Tern <i>Gelochelidon nilotica</i> S, H	Ν	M
161	Whiskered Tern Chlidonias hybrida H	G	M
162	White-winged Tern Chlidonias leucopterus	G	M
163	River Tern <i>Sterna aurantia</i> VU, S	Ν	M
164	Common Tern Sterna hirundo H		M
165	Black-bellied Tern Sterna acuticauda EN, S, H		M
105	XI. Ciconiiformes		
	23. Ciconiidae (Storks)		
166	Asian Openbill Anastomus oscitans		М
167	Black Stork <i>Ciconia nigra</i>		M
168	Woolly-necked Stork Ciconia episcopus NT		M
169	Black-necked Stork Ephippiorhynchus asiaticus* NT	0	
170	Painted Stork Mycteria leucocephala		М
	XII. Suliformes		
	24. Anhingidae (Darters)		
171	Oriental Darter Anhinga melanogaster NT		М
	25. Phalacrocoracidae (Cormorants and Shags)		
172	Little Cormorant Microcarbo niger		М
173	Great Cormorant Phalacrocorax carbo		М
	XIII. Pelecaniformes		
	26. Ardeidae (Herons, Egrets and Bitterns)		
174	Great Bittern Botaurus stellaris	Ν	М
175	Black Bittern Ixobrychus flavicollis		М
176	Cinnamon Bittern <i>Ixobrychus cinnamomeus</i> S		М
177	Little Bittern <i>Ixobrychus minutus</i>	G	М
178	Yellow Bittern <i>Ixobrychus sinensis</i>		М
179	Black-crowned Night Heron Nycticorax nycticorax	Ν	М
180	Little Egret Egretta garzetta		М
181	Western Reef-Egret <i>Egretta gularis</i> H		М

Table 1. Checklist of Birds of Jammu & Kashmir	
--	--

S. No.	Family & Species	S	М
182	Striated Heron Butorides striata	Ν	М
183	Indian Pond-Heron Ardeola grayii		М
184	Eastern Cattle Egret Bubulcus coromandus		М
185	Great Egret Ardea alba		М
186	Intermediate Egret Ardea intermedia		М
187	Grey Heron Ardea cinerea		М
188	Purple Heron Ardea purpurea		М
	27. Threskiornithidae (Ibises and Spoonbills)		
189	Glossy Ibis Plegadis falcinellus		М
190	Black-headed Ibis Threskiornis melanocephalus NT		М
191	Red-naped Ibis Pseudibis papillosa		М
192	Eurasian Spoonbill Platalea leucorodia S, H		М
	XIV. Accipitriformes		
	28. Pandionidae (Osprey)		
193	Osprey Pandion haliaetus S, H	В	М
	29. Accipitridae (Hawks, Eagles, and Kites)		
194	Black-winged Kite Elanus caeruleus		М
195	Bearded Vulture Gypaetus barbatus NT, S, H	В	М
196	Egyptian Vulture Neophron percnopterus EN, S, H	G	М
197	Oriental Honey-buzzard Pernis ptilorhynchus		М
198	Cinereous Vulture Aegypius monachus NT, S	0	М
199	White-rumped Vulture Gyps bengalensis CR, S, H		М
200	Himalayan Vulture Gyps himalayensis NT, S	G	М
201	Griffon Vulture Gyps fulvus S, H		М
202	Crested Serpent-Eagle Spilornis cheela S	0	М
203	Short-toed Snake-Eagle Circaetus gallicus S, H		М
204	Mountain Hawk-Eagle <i>Nisaetus nipalensis</i> NT, S	В	М
205	Black Eagle Ictinaetus malaiensis S		М
206	Indian Spotted Eagle <i>Clanga hastata</i> VU, S		М
207	Greater Spotted Eagle <i>Clanga clanga</i> VU, S		М
208	Booted Eagle <i>Hieraaetus pennatus</i> S	G	М
209	Tawny Eagle <i>Aquila rapax</i> VU, S, H		М
210	Steppe Eagle <i>Aquila nipalensis</i> EN, S		М
211	Eastern Imperial-Eagle <i>Aquila heliaca</i> VU, S	G	М
212	Golden Eagle <i>Aquila chrysaetos</i> S	В	М
213	Bonelli's Eagle Aquila fasciata S		М
214	White-eyed Buzzard Butastur teesa S		М
215	Western Marsh Harrier Circus aeruginosus S, H	0	М
216	Hen Harrier Circus cyaneus S		М
217	Pallid Harrier Circus macrourus NT, S, H		
218	Shikra Accipiter badius S		М
219	Besra Accipiter virgatus S		М
220	Eurasian Sparrowhawk Accipiter nisus S	U	М
221	Northern Goshawk Accipiter gentilis S		М

S. No.	Family & Species	S	М
222	Black Kite <i>Milvus migrans</i>	G	М
223	Brahminy Kite Haliastur indus S		М
224	Pallas's Fish-Eagle <i>Haliaeetus leucoryphus</i> EN, S, H	G	М
225	White-tailed Sea-Eagle Haliaeetus albicilla S		М
226	Lesser Fish-Eagle <i>Icthyophaga humilis*</i> NT, S	0	
227	Common Buzzard Buteo buteo S	G	М
228	Himalayan Buzzard Buteo refectus S	U	М
229	Long-legged Buzzard Buteo rufinus S	G	М
	XV. Strigiformes		
	30. Tytonidae (Barn-owls)		
230	Common Barn-Owl Tyto albaS		М
	31. Strigidae (Owls)		
231	Mountain Scops-Owl Otus spilocephalus		М
232	Indian Scops-Owl Otus bakkamoena		М
233	Collared Scops-Owl Otus lettia		М
234	Eurasian Scops-Owl Otus scops		М
235	Oriental Scops-Owl Otus sunia		М
236	Indian Eagle-Owl Bubo bengalensis S	G	М
237	Eurasian Eagle-Owl Bubo bubo S	В	М
238	Brown Fish-Owl Ketupa zeylonensis S		М
239	Asian Barred Owlet Glaucidium cuculoides		М
240	Collared Owlet Taenioptynx brodiei		М
241	Spotted Owlet Athene brama	G	М
242	Mottled Wood-Owl Strix ocellate* S	0	
243	Brown Wood-Owl Strix leptogrammica* S	В	
244	Tawny Owl Strix aluco	G	М
245	Long-eared Owl Asio otus S		М
246	Short-eared Owl Asio flammeusS		М
247	Brown Boobook Ninox scutulata		М
	XVI. Bucerotiformes		
	32. Upupidae (Hoopoes)		
248	Eurasian Hoopoe Upupa epops	G	М
	33. Bucerotidae (Hornbills)		
249	Indian Grey Hornbill Ocyceros birostris		М
	XVII. Coraciiformes		
	34. Alcedinidae (Kingfishers)		
250	Common Kingfisher Alcedo atthis	G	М
251	White-throated Kingfisher Halcyon smyrnensis	G	М
252	Crested Kingfisher Megaceryle lugubris		М
253	Pied Kingfisher Ceryle rudis	G	М
	35. Meropidae (Bee-eaters)		
254	Green Bee-eater Merops orientalis	0	М
255	Blue-tailed Bee-eater Merops philippinus		М
256	European Bee-eater Merops apiaster	G	М

S. No.	Family & Species	S	М
257	Chestnut-headed Bee-eater Merops leschenaulti		М
	36. Coraciidae (Rollers)		
258	European Roller Coracias garrulus	G	М
259	Indian Roller Coracias benghalensis	0	М
	XVIII. Piciformes		
	37. Megalaimidae (Asian Barbets)		
260	Coppersmith Barbet Psilopogon haemacephalus		М
261	Great Barbet Psilopogon virens	Ν	М
262	Lineated Barbet Psilopogon lineatus		М
263	Brown-headed Barbet Psilopogon zeylanicus		М
264	Blue-throated Barbet Psilopogon asiaticus		М
	38. Picidae (Woodpeckers)		
265	Eurasian Wryneck Jynx torquilla	G	М
266	Speckled Piculet Picumnus innominatus		М
267	Brown-capped Pygmy Woodpecker Yungipicus nanus		М
268	Grey-capped Pygmy Woodpecker Yungipicus canicapillus	G	М
269	Yellow-crowned Woodpecker Leiopicus mahrattensis S, H		М
270	Brown-fronted Woodpecker Dendrocoptes auriceps	G	М
271	Rufous-bellied Woodpecker Dendrocopos hyperythrus*	Ν	
272	Fulvous-breasted Woodpecker Dendrocopos macei		М
273	Himalayan Woodpecker Dendrocopos himalayensis	G	М
274	Black-rumped Flameback Dinopium benghalense		М
275	Lesser Yellownape Picus chlorolophus		М
276	Streak-throated Woodpecker Picus xanthopygaeus	G	М
277	Scaly-bellied Woodpecker Picus squamatus	G	М
278	Grey-headed Woodpecker Picus canus	Ν	М
	XIX. Falconiformes		
	39. Falconidae (Falcons and caracaras)		
279	Lesser Kestrel Falco naumanni		М
280	Common Kestrel Falco tinnunculus H	G	М
281	Red-necked Falcon Falco chicquera NT, S		М
282	Amur Falcon Falco amurensisS		М
283	Merlin Falco columbarius		М
284	Eurasian Hobby Falco subbuteo	U	М
285	Oriental Hobby Falco severus*	0	
286	Saker Falcon Falco cherrug* EN, S, H	В	
287	Peregrine Falcon Falco peregrinus S	0	М
	XX. Psittaciformes		
	40. Psittaculidae (Old World Parrots)		
288	Alexandrine Parakeet Psittacula eupatria NT		М
289	Rose-ringed Parakeet Psittacula krameri	Ν	М
290	Slaty-headed Parakeet Psittacula himalayana	G	М
291	Plum-headed Parakeet Psittacula cyanocephala		М
	XXI. Passeriformes		

S. No.	Family & Species	S	М
	41. Pittidae (Pittas)		
292	Indian Pitta <i>Pitta brachyura</i>		М
	42. Campephagidae (Minivets and Cuckooshrikes)		
293	Small Minivet Pericrocotus cinnamomeus S		М
294	Long-tailed Minivet Pericrocotus ethologus	G	М
295	Rosy Minivet Pericrocotus roseus		М
296	Large Cuckooshrike Coracina macei		М
297	Black-winged Cuckooshrike Lalage melaschistos		М
298	Black-headed Cuckooshrike Lalage melanoptera		М
	43. Vireonidae (Vireos, Shrike-Babblers, and Erpornis)		
299	White-browed Shrike-Babbler Pteruthius aeralatus	Ν	М
300	Green Shrike-Babbler Pteruthius xanthochlorus		М
	44. Oriolidae (Old World Orioles)		
301	Indian Golden Oriole Oriolus kundoo	G	М
	45. Vangidae (Vangas, Helmetshrikes, and Allies)		
302	Common Woodshrike Tephrodornis pondicerianus	0	М
	46. Aegithinidae (loras)		
303	Common lora Aegithina tiphia		М
	47. Rhipiduridae (Fantails)		
304	White-throated Fantail Rhipidura albicollis	Ν	М
305	White-browed Fantail Rhipidura aureola		М
	48. Dicruridae (Drongos)		
306	Black Drongo Dicrurus macrocercus		М
307	Ashy Drongo Dicrurus leucophaeus	G	М
308	Hair-crested Drongo Dicrurus hottentottus		М
	49. Monarchidae (Monarch Flycatchers)		
309	Black-naped Monarch Hypothymis azurea		М
310	Indian Paradise-Flycatcher Terpsiphone paradisi	G	М
	50. Laniidae (Shrikes)		
311	Isabelline Shrike Lanius isabellinus H		М
312	Brown Shrike Lanius cristatus		М
313	Bay-backed Shrike Lanius vittatus		М
314	Long-tailed Shrike Lanius schach	G	М
315	Grey-backed Shrike Lanius tephronotus		М
316	Great Grey Shrike Lanius excubitor H		М
317	Lesser Grey Shrike Lanius minor		М
	51. Corvidae (Crows, Jays, and Magpies)		
318	Eurasian Jay Garrulus glandarius	0	М
319	Black-headed Jay Garrulus lanceolatus	Ν	М
320	Yellow-billed Blue-Magpie Urocissa flavirostris	G	М
321	Red-billed Blue-Magpie Urocissa erythroryncha	G	М
322	Rufous Treepie Dendrocitta vagabunda		М
323	Grey Treepie Dendrocitta formosae	0	М
324	Eurasian Magpie <i>Pica pica*</i>	G	

S. No.	Family & Species	S	М
325	Kashmir Nutcracker Nucifraga multipunctata	G	М
326	Red-billed Chough Pyrrhocorax pyrrhocorax	G	М
327	Yellow-billed Chough Pyrrhocorax graculus	G	М
328	Eurasian Jackdaw Corvus monedula	G	М
329	House Crow Corvus splendens	G	М
330	Rook Corvus frugilegus	G	М
331	Carrion Crow Corvus corone		М
332	Hooded Crow Corvus cornix*	0	
333	Large-billed Crow Corvus macrorhynchos	G	М
334	Common Raven Corvus corax	0	М
	52. Stenostiridae (Fairy Flycatchers)		
335	Yellow-bellied Fantail Chelidorhynx hypoxanthus		Μ
336	Grey-headed Canary-Flycatcher Culicicapa ceylonensis	Ν	Μ
	53. Paridae (Tits, Chikadees, and Titmice)		
337	Fire-capped Tit Cephalopyrus flammiceps	G	М
338	Yellow-browed Tit Sylviparus modestus*	U	
339	Coal Tit Periparus ater	G	М
340	Rufous-naped Tit Periparus rufonuchalis	G	М
341	Rufous-vented Tit Periparus rubidiventris H		
342	Green-backed Tit Parus monticolus	G	Μ
343	Cinereous Tit Parus cinereus	G	М
344	Himalayan Black-lored Tit Machlolophus xanthogenys		М
	54. Alaudidae (Larks)		
345	Ashy-crowned Sparrow-Lark Eremopterix griseus		Μ
346	Singing Bushlark Mirafra javanica*	Ν	
347	Bengal Bushlark Mirafra assamica		М
348	Indian Bushlark Mirafra erythroptera		М
349	Horned Lark Eremophila alpestris	G	М
350	Greater Short-toed Lark Calandrella brachydactyla		М
351	Hume's Short-toed Lark Calandrella acutirostris	Ν	М
352	Bimaculated Lark Melanocorypha bimaculata	0	М
353	Sand Lark Alaudala raytal	В	М
354	Eurasian Skylark Alauda arvensis	G	М
355	Oriental Skylark Alauda gulgula H	G	М
356	Crested Lark Galerida cristata	В	Μ
	55. Cisticolidae (Cisticolas and Allies)		
357	Common Tailorbird Orthotomus sutorius		М
358	Himalayan Prinia Prinia crinigera	G	М
359	Grey-breasted Prinia Prinia hodgsonii		Μ
360	Delicate Prinia Prinia lepida		Μ
361	Jungle Prinia Prinia sylvatica	В	М
362	Yellow-bellied Prinia Prinia flaviventris		Μ
363	Ashy Prinia Prinia socialis	Ν	М
364	Plain Prinia Prinia inornata		М

C NL		6	
S. No.	Family & Species	S	M
365	Zitting Cisticola <i>Cisticola juncidis</i>		М
	56. Acrocephalidae (Reed Warblers and Allies)		
366	Booted Warbler Iduna caligata		М
367	Sykes's Warbler Iduna rama		М
368	Moustached Warbler Acrocephalus melanopogon		М
369	Paddyfield Warbler Acrocephalus agricola	В	М
370	Blunt-winged Warbler Acrocephalus concinens	N	М
371	Blyth's Reed Warbler Acrocephalus dumetorum		М
372	Clamorous Reed Warbler Acrocephalus stentoreus	G	М
	57. Locustellidae (Grassbirds and Allies)		
373	Grasshopper Warbler Locustella naevia*	0	
374	Long-billed Bush Warbler <i>Locustella major*</i> NT, H	U	
375	Bristled Grassbird Schoenicola striatus VU, S, H		М
376	Striated Grassbird Megalurus palustris		М
	58. Pnoepygidae (Cupwings)		
377	Scaly-breasted Wren-Babbler Pnoepyga albiventer		М
	59. Hirundinidae (Swallows)		
378	Grey-throated Martin Riparia chinensis		М
379	Sand Martin Riparia riparia		М
380	Pale Martin Riparia diluta		М
381	Eurasian Crag-Martin Ptyonoprogne rupestris H	Ν	М
382	Barn Swallow Hirundo rustica	G	М
383	Wire-tailed Swallow Hirundo smithii	Ν	М
384	Northern House-Martin Delichon urbicum	В	М
385	Asian House-Martin Delichon dasypus	G	М
386	Red-rumped Swallow Cecropis daurica	G	М
387	Streak-throated Swallow Petrochelidon fluvicola		М
	60. Pycnonotidae (Bulbuls)		
388	Black Bulbul Hypsipetes leucocephalus	G	М
389	Red-vented Bulbul Pycnonotus cafer	G	М
390	Himalayan Bulbul Pycnonotus leucogenys	G	М
	61. Phylloscopidae (Leaf Warblers)		
391	Ashy-throated Warbler Phylloscopus maculipennis		М
392	Buff-barred Warbler Phylloscopus pulcher	G	М
393	Hume's Warbler Phylloscopus humei	G	М
394	Lemon-rumped Warbler Phylloscopus chloronotus	G	М
395	Tytler's Leaf Warbler Phylloscopus tytleri	G	М
396	Sulphur-bellied Warbler Phylloscopus griseolus H	В	М
397	Tickell's Leaf Warbler Phylloscopus affinis	G	М
398	Mountain Chiffchaff Phylloscopus sindianus		М
399	Common Chiffchaff Phylloscopus collybita	Ν	М
400	Whistler's Warbler Phylloscopus whistleri		М
401	Green Warbler Phylloscopus nitidus		М
402	Greenish Warbler Phylloscopus trochiloides	G	М
	, ,		

S. No.	Family & Species	S	М
403	Large-billed Leaf Warbler Phylloscopus magnirostris	G	М
404	Western Crowned Warbler Phylloscopus occipitalis	G	М
405	Blyth's Leaf Warbler Phylloscopus reguloides	0	
406	Grey-hooded Warbler Phylloscopus xanthoschistos	G	М
	62. Scotocercidae (Bush Warblers and Allies)		
407	Grey-sided Bush Warbler Cettia brunnifrons		М
408	Brownish-flanked Bush Warbler Horornis fortipes	G	М
409	Aberrant Bush Warbler Horornis flavolivaceus		М
	63. Aegithalidae (Long-tailed Tits)		
410	Black-throated Tit Aegithalos concinnus	В	М
411	White-throated Tit Aegithalos niveogularis	G	М
	64. Sylviidae (Sylviid Warblers and Allies)		
412	Lesser Whitethroat Curruca curruca	G	М
413	Asian Desert Warbler Curruca nana		М
414	Common Whitethroat Curruca communis		М
	65. Paradoxornithidae (Parrotbills and Allies)		
415	Yellow-eyed Babbler Chrysomma sinense		М
	66. Zosteropidae (White-eyes, Yuhinas, and Allies)		
416	Whiskered Yuhina Yuhina flavicollis		М
417	Indian White-eye Zosterops palpebrosus	В	М
	67. Timaliidae (Tree-Babblers, Scimitar-Babblers, and Allies)		
418	Black-chinned Babbler Cyanoderma pyrrhops	G	М
419	White-browed Scimitar-Babbler Pomatorhinus schisticeps		М
420	Rusty-cheeked Scimitar-Babbler Erythrogenys erythrogenys	G	М
	68. Pellorneidae (Ground Babblers and Allies)		
421	Puff-throated Babbler Pellorneum ruficeps		М
422	Rufous-vented Grass Babbler Laticilla burnesii NT, S		М
	69. Leiothrichidae (Babblers, Laughingthrushes, and Allies)		
423	Streaked Laughingthrush Trochalopteron lineatum	G	М
424	Variegated Laughingthrush Trochalopteron variegatum	G	М
425	Chestnut-crowned Laughingthrush Trochalopteron erythrocephalum		М
426	Rufous Sibia Heterophasia capistrata	Ν	М
427	Chestnut-tailed Minla Actinodura strigula		М
428	Red-billed Leiothrix Leiothrix lutea	0	М
429	Jungle Babbler Argya striata		М
430	Common Babbler Argya caudata	G	М
431	Striated Babbler Argya earlei		М
432	White-crested Laughingthrush Garrulax leucolophus		М
433	Rufous-chinned Laughingthrush Ianthocincla rufogularis	0	М
434	White-throated Laughingthrush Pterorhinus albogularis	Ν	М
	70. Regulidae (Goldcrest and Kinglets)		
435	Goldcrest Regulus regulus	G	М
	71. Tichodromidae (Wallcreeper)		

S. No.	Family & Species	S	М
436	Wallcreeper <i>Tichodroma muraria</i> H	G	M
400	72. Sittidae (Nuthatches)	U	IVI
477	White-cheeked Nuthatch Sitta leucopsis	G	N.A.
437 438	Chestnut-bellied Nuthatch Sitta cinnamoventris	N	M
	Kashmir Nuthatch <i>Sitta cashmirensis</i>		
439		G	М
440	73. Certhiidae (Treecreepers)	C	
440	Hodgson's Treecreeper Certhia hodgsoni	G	M
441	Bar-tailed Treecreeper <i>Certhia himalayana</i>	G	М
442	74. Troglodytidae (Wrens)	C	
442	Eurasian Wren Troglodytes troglodytes	G	М
	75. Cinclidae (Dippers)		
443	White-throated Dipper Cinclus cinclus	N	М
444	Brown Dipper Cinclus pallasii H	G	М
	76. Sturnidae (Starlings)		
445	Common Starling <i>Sturnus vulgaris</i>	G	М
446	Rosy Starling Pastor roseus		М
447	Asian Pied Starling <i>Gracupica contra</i>		М
448	Brahminy Starling Sturnia pagodarum	G	М
449	Chestnut-tailed Starling Sturnia malabarica		М
450	Common Myna Acridotheres tristis	G	М
451	Bank Myna Acridotheres ginginianus H		М
452	Jungle Myna Acridotheres fuscus	Ν	М
453	Spot-winged Starling Saroglossa spilopterus H		М
	77. Turdidae (Thrushes and Allies)		
454	Grandala Grandala coelicolor	Ν	М
455	Alpine Thrush Zoothera mollissima	0	М
456	Scaly Thrush Zoothera dauma	G	М
457	Orange-headed Thrush Geokichla citrina		М
458	Mistle Thrush Turdus viscivorus	G	М
459	Grey-winged Blackbird Turdus boulboul	Ν	М
460	Tickell's Thrush Turdus unicolor	G	М
461	Tibetan Blackbird Turdus maximus H	G	М
462	Chestnut Thrush Turdus rubrocanus	G	М
463	Black-throated Thrush Turdus atrogularis	G	М
464	Red-throated Thrush Turdus ruficollis		М
465	Dusky Thrush Turdus eunomus		М
	78. Muscicapidae (Old World Flycatchers)		
466	Dark-sided Flycatcher Muscicapa sibirica	G	М
467	Asian Brown Flycatcher Muscicapa dauurica		М
468	Spotted Flycatcher Muscicapa striata		М
469	Rufous-tailed Scrub-Robin Cercotrichas galactotes		М
470	Indian Robin Copsychus fulicatus		М
471	Oriental Magpie-Robin Copsychus saularis	G	М
472	Rufous-bellied Niltava Niltava sundara		М

S. No.	Family & Species	S	М
473	Verditer Flycatcher Eumyias thalassinus	G	М
474	Blue-throated Flycatcher Cyornis rubeculoides		М
475	Tickell's Blue Flycatcher Cyornis tickelliae		М
476	Indian Blue Robin Larvivora brunnea	G	М
477	White-bellied Redstart Luscinia phaenicuroides	G	М
478	Bluethroat Luscinia svecica	G	М
479	Blue Whistling-Thrush Myophonus caeruleus	G	М
480	Little Forktail Enicurus scouleri	G	М
481	Spotted Forktail Enicurus maculatus	G	М
482	Siberian Rubythroat Calliope calliope		М
483	Himalayan Rubythroat Calliope pectoralis	G	М
484	Himalayan Bush-Robin Tarsiger rufilatus	G	М
485	Golden Bush-Robin Tarsiger chrysaeus		М
486	Slaty-blue Flycatcher Ficedula tricolor	G	М
487	Rufous-gorgeted Flycatcher Ficedula strophiata H	G	М
488	Ultramarine Flycatcher Ficedula superciliaris	G	М
489	Rusty-tailed Flycatcher Ficedula ruficauda	G	М
490	Taiga Flycatcher Ficedula albicilla	G	М
491	Kashmir Flycatcher <i>Ficedula subrubra</i> VU, S, H	G	М
492	Red-breasted Flycatcher Ficedula parva	Ν	М
493	Blue-fronted Redstart Phoenicurus frontalis	G	М
494	Plumbeous Water-Redstart Phoenicurus fuliginosus H	G	М
495	Eversmann's Redstart Phoenicurus erythronotus	G	М
496	White-capped Redstart Phoenicurus leucocephalus	G	М
497	Blue-capped Redstart Phoenicurus coeruleocephala	G	М
498	Common Redstart Phoenicurus phoenicurus		М
499	White-winged Redstart Phoenicurus erythrogastrus	Ν	М
500	Black Redstart Phoenicurus ochruros	G	М
501	Chestnut-bellied Rock-Thrush Monticola rufiventris		М
502	Blue-capped Rock-Thrush Monticola cinclorhyncha H	G	М
503	Rufous-tailed Rock-Thrush Monticola saxatilis	G	М
504	Blue Rock-Thrush Monticola solitarius H	G	М
505	Siberian Stonechat Saxicola maurus	G	М
506	White-tailed Stonechat Saxicola leucurus		М
507	Pied Bushchat Saxicola caprata	G	М
508	Grey Bushchat Saxicola ferreus	G	М
509	Northern Wheatear Oenanthe oenanthe	G	М
510	Isabelline Wheatear Oenanthe isabellina H	Ν	М
511	Desert Wheatear Oenanthe deserti H	Ν	М
512	Pied Wheatear Oenanthe pleschanka	В	М
513	Brown Rock Chat Oenanthe fusca		М
514	Variable Wheatear Oenanthe picata H	В	М
515	Red-tailed Wheatear Oenanthe chrysopygia	0	М
	79. Bombycillidae (Waxwings)		

S. No.	Family & Species	S	М
516	Bohemian Waxwing Bombycilla garrulus*	Ν	
	80. Dicaeidae (Flowerpeckers)		
517	Thick-billed Flowerpecker Dicaeum agile H		М
518	Pale-billed Flowerpecker Dicaeum erythrorhynchos		М
519	Fire-breasted Flowerpecker Dicaeum ignipectus		М
	81. Nectariniidae (Sunbirds and Spiderhunters)		
520	Purple Sunbird Cinnyris asiaticus	Ν	М
521	Mrs. Gould's Sunbird Aethopyga gouldiae		М
522	Crimson Sunbird Aethopyga siparaja		Μ
	82. Ploceidae (Weavers and Allies)		
523	Streaked Weaver Ploceus manyar		М
524	Baya Weaver Ploceus philippinus		М
525	Black-breasted Weaver Ploceus benghalensis		М
	83. Estrildidae (Waxbills and Allies)		
526	Indian Silverbill Euodice malabarica		М
527	Scaly-breasted Munia Lonchura punctulata		М
528	Tricoloured Munia Lonchura malacca		М
529	Red Munia Amandava amandava	0	М
	84. Prunellidae (Accentors)		
530	Alpine Accentor Prunella collaris	G	М
531	Altai Accentor Prunella himalayana	G	М
532	Robin Accentor Prunella rubeculoides	Ν	М
533	Rufous-breasted Accentor Prunella strophiata	G	М
534	Brown Accentor Prunella fulvescens		М
535	Black-throated Accentor Prunella atrogularis	G	М
	85. Passeridae (Old World Sparrows)		
536	House Sparrow Passer domesticus	G	М
537	Spanish Sparrow Passer hispaniolensis*	Ν	
538	Sind Sparrow Passer pyrrhonotus		М
539	Russet Sparrow Passer cinnamomeus	G	М
540	Yellow-throated Sparrow Gymnoris xanthocollis		М
	86. Motacillidae (Wagtails and Pipits)		
541	Forest Wagtail Dendronanthus indicus S, H		М
542	Grey Wagtail Motacilla cinerea	G	М
543	Western Yellow Wagtail Motacilla flava	G	М
544	Citrine Wagtail Motacilla citreola	G	М
545	White-browed Wagtail Motacilla maderaspatensis		М
546	White Wagtail Motacilla alba	G	М
547	Richard's Pipit Anthus richardi		М
548	Paddyfield Pipit Anthus rufulus	G	М
549	Long-billed Pipit Anthus similis	G	М
550	Tawny Pipit Anthus campestris H	G	М
551	Upland Pipit Anthus sylvanus		М
552	Rosy Pipit Anthus roseatus	G	М

S. No.	Family & Species	S	М
553	Tree Pipit Anthus trivialis	G	М
554	Olive-backed Pipit Anthus hodgsoni H		М
555	Red-throated Pipit Anthus cervinus		М
556	Water Pipit Anthus spinoletta	G	М
557	Buff-bellied Pipit Anthus rubescens		М
	87. Fringillidae (Finches, Euphonias, and Allies)		
558	Common Chaffinch Fringilla coelebs		М
559	Brambling Fringilla montifringilla		М
560	Black-and-yellow Grosbeak Mycerobas icterioides	G	М
561	Collared Grosbeak Mycerobas affinis		М
562	White-winged Grosbeak Mycerobas carnipes	G	М
563	Hawfinch Coccothraustes Coccothraustes*	G	
564	Common Rosefinch Carpodacus erythrinus	G	М
565	Blyth's Rosefinch Carpodacus grandis		М
566	Pink-browed Rosefinch Carpodacus rodochroa	G	М
567	Red-fronted Rosefinch Carpodacus puniceus		М
568	Himalayan White-browed Rosefinch Carpodacus thura	G	М
569	Orange Bullfinch Pyrrhula aurantiaca	G	М
570	Red-headed Bullfinch Pyrrhula erythrocephala		М
571	Spectacled Finch Callacanthis burtoni	G	М
572	Dark-breasted Rosefinch Procarduelis nipalensis	0	М

S. No.	Family & Species	S	М
573	Plain Mountain Finch Leucosticte nemoricola	G	М
574	Yellow-breasted Greenfinch Chloris spinoides	Ν	М
575	Twite Linaria flavirostris		М
576	Red Crossbill Loxia curvirostra		М
577	European Goldfinch Carduelis carduelis	G	М
578	Fire-fronted Serin Serinus pusillus	G	М
	88. Emberizidae (Old World Buntings)		
579	Crested Bunting Emberiza lathami	Ν	М
580	Black-headed Bunting Emberiza melanocephala		М
581	Red-headed Bunting Emberiza bruniceps		М
582	Chestnut-eared Bunting Emberiza fucata	G	М
583	Rock Bunting Emberiza cia	G	М
584	White-capped Bunting Emberiza stewarti	G	М
585	Yellowhammer Emberiza citrinella		М
586	Pine Bunting Emberiza leucocephalos	Ν	М
587	Grey-necked Bunting Emberiza buchanani		М
588	Ortolan Bunting Emberiza hortulana*	0	
589	Striolated Bunting Emberiza striolata		М
590	Eurasian Reed Bunting Emberiza schoeniclus	0	М
591	Little Bunting Emberiza pusilla		М
592	Rustic Bunting Emberiza rustica VU		М

Table headers: S: Specimen, M: Media

Status: CR: Critically Endangered, EN: Endangered, VU: Vulnerable, NT: Near Threatened as per IUCN, S: Schedule–1 under Wild Life (Protection) Amendment Act 2022 (WLPA), H: 'High' Conservation Priority as per State of India's Birds (SoIB), *: Species not reported since 1950. Sources: B: Bombay Natural History Society (BNHS), G: GBIF, N: Natural History Museum, UK (NHMUK), U: United States National Museum (USNM), M: Macaulay Library, O: Other specimens (See supplementary Information: https://doi.org/10.5281/zenodo.10401432. Species with blank columns are

those accepted based solely on documentation.

Acknowledgments

The authors express their gratitude to Praveen J for providing inspiration and assistance throughout the compilation of this checklist. We extend our heartfelt thanks to everyone from within and outside of Jammu & Kashmir, who contribute their bird sightings, photographs, and audio recordings to eBird and various birding groups on social media. The authors are particularly grateful to Hein van Grouw from the NHM London and Rahul Khot from the BNHS for their valuable information on bird specimens. We also want to acknowledge the special contributions of Ashwin Viswanathan, Suresh K Rana, and the eBird editors and reviewers of Jammu & Kashmir, who diligently maintain strict data quality control on eBird. Muzaffar A. Kichloo would like to thank Tim Inskipp for his valuable comments on the sight records and Swetashree Purohit for her constant assistance in providing details and scans from various books and journals. The authors would like to extend heartfelt appreciation to the six anonymous referees whose dedicated review greatly contributed to the quality of this paper. Their insightful feedback and constructive suggestions were instrumental in refining our work. Lastly, special thanks to Pritam Baruah for his invaluable contributions to editing our manuscript.

References

- Abdulali, H., 1968. A catalogue of the birds in the collection of the Bombay Natural History Society-1. Gaviiformes to Ciconiiformes. *Journal of the Bombay Natural History Society* 65 (1): 182–199.
- Abdulali, H., 1969a. A catalogue of the birds in the collection of the Bombay Natural

History Society-3. Falconiformes. *Journal of the Bombay Natural History Society* 65 (3): 696–723.

- Abdulali, H., 1969b. A catalogue of the birds in the collection of the Bombay Natural History Society-4. Megapodidae, Phasianidae, and Turnicidae. *Journal of the Bombay Natural History Society* 66 (2): 251–285.
- Abdulali, H., 1969c. A catalogue of the birds in the collection of the Bombay Natural History Society-5. Gruidae, Rallidae, Heliornithidae, Otididae, Jacanidae, Haematopodidae, and Charadriidae (Charadriinae). *Journal of the Bombay Natural History Society* 66 (3): 542–559.
- Abdulali, H., 1970a. A catalogue of the birds in the collection of the Bombay Natural History Society-6. Scolopacinae (part). *Journal of the Bombay Natural History Society* 67 (1): 51–56.
- Abdulali, H., 1970b. A catalogue of the birds in the collection of the Bombay Natural History Society-7. Scolopacinae (part), Phalaropinae, Rostratulidae, Recurvirostridae, dromadidae, Burhinidae, Glareolidae, Stercorariidae, Laridae. Journal of the Bombay Natural History Society 67 (2): 279–298.
- Abdulali, H., 1971. A catalogue of the birds in the collection of the Bombay Natural History Society-8. Pteroclididae and Columbidae. *Journal of the Bombay Natural History Society* 68 (1): 127–152.
- Abdulali, H., 1972. A catalogue of the birds in the collection of the Bombay Natural History Society-10. Cuculidae. *Journal of the Bombay Natural History Society* 68 (3): 756–772.
- Abdulali, H., 1974. A catalogue of the birds in the collection of the Bombay Natural History Society-15. Upupidae and Bucerotidae. *Journal of the Bombay Natural*

History Society 70 (2): 339-345.

- Abdulali, H., 1976. A catalogue of the birds in the collection of the Bombay Natural History Society-18. (Eurylaimidae, Pittidae, Alaudidae). *Journal of the Bombay Natural History* Society 72 (2): 477–505 (1975).
- Abdulali, H., 1981. A catalogue of the birds in the collection of the Bombay Natural History Society-23. Campephagidae: (Cuckoo-Shrikes, Minivets); Irenidae: (Fairy Bluebirds, Ioras, Leaf Birds). *Journal of the Bombay Natural History Society* 78 (2): 261–286.
- Abdulali, H., 1985. A catalogue of the birds in the collection of the Bombay Natural History Society-29. Muscicapidae (Muscicapinae, Pachycephalinae). *Journal of the Bombay Natural History Society* 82 (1): 87–113.
- Abdulali, H., 1986a. A catalogue of the birds in the collection of the Bombay Natural History Society-30. Muscicapidae (Sylviinae). *Journal of the Bombay Natural History Society* 83 (1): 130–163.
- Abdulali, H., 1986b. A catalogue of the birds in the collection of the Bombay Natural History Society-31. Muscicapidae (Sylviinae) (Contd.). *Journal of the Bombay Natural History Society* 83 (2): 339–359.
- Adams, A. L., 1859. The birds of Cashmere and Ladakh. Proceedings of the Zoological Society of London 395: 169–190.
- Alexander, H. G., 1950. Some notes on the genus *Phylloscopus* in Kashmir. *Journal of the Bombay Natural History Society* 49 (1): 9–13.
- Ali, S., & Ripley, S. D., 1987. Compact handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka. 2nd ed. Delhi: Oxford University Press. Pp. i–xlii, 1 1., 1–737, 52 II.
- Awan, M. N., Ali, H., & Lee, D. C. 2012. An annotated checklist of birds and conservation issues in Salkhala Game Reserve, an isolated Important Bird Area in Azad Kashmir, Pakistan. *Forktail* 28: 38–43.
- Awan, M. N., Rafique, S. M., & Chaudry, M. I., 2010. Changes to the checklist of the birds of Muzaffarabad city, Azad Jammu and Kashmir, Pakistan. *Podoces* 4(2): 117–123.
- Baker, E. C. S., 1924. The fauna of British India, including Ceylon and Burma. Birds. 2nd ed. London: Taylor and Francis. Vol. II of 8 vols. Pp. i–xxiii+1, 1–561.
- Bates, R. S. P., 1923. Notes on Hugh Whistler's "A contribution to the ornithology of Cashmere" in vol. XXVIII, no.4. *Journal of the Bombay Natural History Society*. 29: (3) 798–802.
- Bates, R. S. P., 1936. On the birds of the Kishenganga Valley, Kashmir. *Journal of the Bombay Natural History Society* 38 (3): 520–539.
- Bates, R. S. P., & Lowther, E. H. N., 1952. Breeding Birds in Kashmir. Oxford University Press, UK. Pp. i-xxiii, 1–367
- Beresford, G. P., 1944. The winter foods of birds in Kashmir. Journal of the Bombay Natural History Society 45 (1): 86–88.
- Biddulph, J., 1881. On the birds of Gilgit. Ibis 4(17): 35-102.
- Biddulph, J., 1882. Further notes on the birds of Gilgit. Ibis 10(4): 257-278.
- Blyth, E., 1853. Report of Curator, Zoological Department, for August meeting. Journal of the Asiatic Society of Bengal 22(2): 580–584.
- Britannica, T. Editors of Encyclopedia, 2023. Kashmir. Encyclopedia Britannica. https:// www.britannica.com/place/Kashmir-region-Indian-subcontinent. [Accessed on 21 May 2023.]
- Brooks, W. E., 1872. Notes on the ornithology of Kashmir. Journal of the Asiatic Society of Bengal 41(2): 73–86.
- Collar, N. J., 2001. Asian birds on the brink. Oriental Bird Club Bulletin 34: 60-65.
- Cordeaux, W. W., 1888. Notes on the birds of Cashmere and the Dras District. *Ibis* 30 (2): 218–226.
- Cordeaux, W. W., 1894. List of birds observed in Dras and Suru. Ibis 36 (3): 367-374.
- Eaton, J., Hoit, M., & Graham, R., 2022. Webpage URL: https://ebird.org/checklist/ S120118972. [Accessed on 07 June 2023.]
- eBird, 2023. Species maps: Snowy-browed Flycatcher *Ficedula hyperythra*. Webpage URL: https://ebird.org/india/species/snbfly1. [Accessed on 25 February 2023.]
- Gosler, A., & Clement, P., 2020. Rufous-vented Tit (*Periparus rubidiventris*), version 1.0. In Birds of the World (J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, & E. de Juana, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow. ruvtit2.01
- Grimmett, R., Roberts, T. J. & Inskipp, T., 2008. Birds of Pakistan. Helm Field Guides. Christopher Helm. London, 1–256.
- Grimmett, R., Inskipp, C., & Inskipp, T., 2011. *Birds of the Indian Subcontinent*. Helm Field Guides. 1–528. Oxford University Press & Christopher Helm. London.
- Henderson, G., & Hume, A. O., 1873. Ornithology. II. Detailed list of the birds observed by the Yarkand expedition. Pp 170304 in Henderson, G. & Hume, A. O. eds. *Lahore to Yarkand*. London: L. Reeve & Co.
- Holmes, P. R., & Parr, A. J., 1989. A checklist of the birds of Haigam Rakh, Kashmir. Journal of the Bombay Natural History Society 85 (3): 465–473.
- Hussain, S., & Kait, R., 2013. Studies on avian diversity of Tehsil Mendhar, Poonch, J&K,

India. Journal of Biosphere 2(1): 66-71.

- ISFR, 2021. India State of Forest Report. Published by Forest Survey of India (Ministry of Environment & Forests), Dehradun, Uttarakhand, India. Website URL: https://fsi.nic. in/forest-report-2021-details. [Accessed on 22 February 2023.]
- IUCN, 2024. The IUCN Red List of Threatened Species. Version 2023-1. Webpage URL: https://www.iucnredlist.org [Accessed on 02 February 2024.]
- Jamdar, N., & Price, T., 1990. Simla Black Tit *Parus rufonuchalis* and Rufous-bellied Crested Tit *Parus rubidiventris* breeding sympatrically in Kashmir. *Journal of the Bombay Natural History Society* 87(2): 302–303.
- J&K Department of Wildlife Protection, 2023. Webpage URL: http://jkwildlife.com/wild/ index.asp. [Accessed on 20 January 2023.]
- Khaira, N., 2018. Website URL: https://ebird.org/checklist/S72781114. [Accessed on 24 October 2023.]
- Koul, S. C., 1939. Birds of Kashmir. Srinagar: Lachman Dhar. Pp. 1-103.
- Koul, S. C., 1930. Vernacular names for Kashmir birds. Journal of the Bombay Natural History Society 34 (2): 571–573.
- Kumar, P., 2016. Website URL: https://ebird.org/india/checklist/S39161591. [Accessed on 29 January 2023.]
- Lawrence, W. R., 1895. The valley of Kashmir. H. Frowde, London. 1-467p.
- Magrath, H. A. F., 1908. Notes on the birds of Thandiani. Journal of the Bombay Natural History Society 18 (2): 284–299.
- Magrath, H. A. F., 1912. Bird notes by the way to Kashmir. *Journal of the Bombay Natural History Society* 20(2): 545–552.
- Magrath, H. A. F., 1921. Kashmir Bird Notes. Journal of the Bombay of Natural History Society 28(1): 276–279.
- McClure, H. E., & Leelavit, P., 1972. Birds Banded in Asia During the MAPS Program, by locality, from 1963 through 1971. 1–478. U.S. Army Research and Development Group. Bangkok.
- McMahon, A. H., 1899. Notes on the fauna of the Gilgit District. *Journal of the Asiatic Society of Bengal* 68 (2): 105–109.
- Ministry of Home Affairs, 2019. Maps of newly formed Union Territories of Jammu Kashmir and Ladakh, with the map of India Website URL: https://pib.gov.in/ PressreleasePage.aspx?Prld=1590112. [Accessed on 21 May 2023.]
- Mitchell, F. J., 1911. Little Bustard (*Otis tetrax*) in Kashmir. *Journal of the Bombay Natural History Society* 20 (4): 1154.
- Naoroji, R., 2006. Birds of prey of the Indian Subcontinent. Reprint ed. New Delhi: Om Books International. Pp. 1–692.
- Ogilvie-Grant, W. R., 1893. Catalogue of the game birds (Pterocletes, Gallinæ, Opisthocomi, Hemipodii) in the collection of the British Museum. London: *British Museum of Natural History*. Vol. XXII of 27 vols. Pp. i–xvi, 1–585.
- Oliver, D. G., 1919. Spot bill duck in Kashmir. *Journal of the Bombay Natural History Society* 26 (2): 675.
- Osmaston, B. B., 1925. The birds of Ladakh. Ibis 87 (3): 663-719.
- Osmaston, B. B., 1923. Bird life in Gulmarg. *Journal of the Bombay Natural History Society* 29(2): 493–502.
- Osmaston, B. B., 1927a. Notes on the birds of Kashmir Part I. Journal of the Bombay Natural History Society 31(4): 975–999.
- Osmaston, B. B., 1927b. The birds of Kashmir Part II. *Journal of the Bombay Natural History Society* 32(1): 134–153.
- Osmaston, B. B., 1930. A tour in Further Kashmir. Journal of the Bombay Natural History Society 34: 108–134.
- Pandit, A. K., 1982. Feeding ecology of breeding birds in five wetlands of Kashmir. Indian Journal of Ecology 9 (2): 181–19.
- Pittie, A., 2023. Bibliography of South Asian Ornithology. Webpage URL: http://www. southasiaornith.in. [Accessed on 25 May 2022.]
- Prasad, S., 2012. Website: http://orientalbirdimages.org/search.php?Bird_ID=791. [Accessed on 03 August 2020.]
- Praveen, J., & Jayapal, R., 2024. Checklist of the birds of India (v8.0). Website URL: http://www.indianbirds.in/india/. [Date of publication: 30 January 2024.]
- Praveen, J., Jayapal, R., & Pittie, A., 2013. Notes on Indian rarities–1: Seabirds. Indian BIRDS 8 (5): 113–125.
- Praveen, J., Subramanya, S., & Raj, V. M., 2016. A checklist of the birds of Karnataka. Indian BIRDS 12 (4&5): 89–118.
- Price, T., & Jamdar, N., 1990. The breeding birds of Overa Wildlife Sanctuary, Kashmir. Journal of the Bombay Natural History Society 87 (1): 1–15.
- Rahmani, A. R., Balachandran, S., George, A., Prakash, V., Sathyaselvam, P., Dutta, S., Jathar, G., & Khan, N. I., 2008. Surveillance and Monitoring of Avian Influenza in Wintering birds of India. Final Report submitted to the Ministry of Environment and Forests, Govt. of India. Bombay Natural History Society. Pp.1–127.
- Rahmani, A. R., Islam, Z., Ahmad, K., Suhail, I., Chandan, P., & Zarri, A. A., 2012. Important Bird Areas of Jammu & Kashmir. Indian Bird Conservation Network,

Bombay Natural History Society, Royal Society for the Protection of Birds and BirdLife International. Oxford University Press, Mumbai. Pp. xii + 151.

- Rahmani, A. R., Suhail, I., Chandan, P., Ahmad, K., & Zarri, A. A., 2013. Threatened birds of Jammu & Kashmir. Oxford University Press, Oxford. 1–150p.
- Rasmussen, P. C., & Anderton, J. C., 2012. Birds of South Asia: the Ripley guide: field guide. 1: 1–378. Smithsonian Institution and Lynx Edicions. Washington, D.C. and Barcelona.
- Richmond, C. W., 1895. Catalogue of a collection of birds made by Doctor W.L. Abbott in Kashmir, Baltistan and Ladakh, with notes on some of the species, and a description of a new species of *Cyanecula*. *Proceedings of the United States National Museum* 18: (1078) 451–503.
- Ripley, S. D., 1952. Breeding Birds of Kashmir. Wilson Bulletin 64 (4): 249–250.
- Roberts, T. J., 1991. The birds of Pakistan: Regional Studies and non-Passeriformes. 1st ed. Karachi: Oxford University Press. Vol. 1 of 2 vols. Pp. i–xli, 1–598.
- Roberts, T. J., 2002. Additions to the checklist of the birds of Pakistan, Vol. 1 Non-Passeriformes, Vol. 2 Passeriformes. *Journal of the Bombay Natural History Society* 99 (2): 323–325.
- Roonwal, M. L., 1941. Catalogue of birds in the Indian Museum, Calcutta. I. Columbidae (Pigeons and Doves). *Records of the Indian Museum* 43 (3): 281–360.
- Roonwal, M. L., 1947. Catalogue of Birds in the Indian Museum, Calcutta. II. Pterocletes (Sand-Grouse or Pigeon-Grouse). *Records of the Indian Museum* 45 (1): 57–73.
- Sagar, V., & Thapar, R., 2021. Website URL: https://ebird.org/checklist/S80683792. [Accessed on 24 October 2023.]
- Salvin, O., 1896. Catalogue of birds in the British Museum. British Museum of Natural History. 25: 1–458.
- Sclater, P. L., & Shelley, G. E., 1891. Catalogue of the Picariea in the Collection of the British Museum. Scansores and Coccyges, containing the families Rhamphastidae, Galbulidae and Bucconidae and the families Indicatoridae, Capitonidae, Cuclidae, and Musophagidae. Volume XIX. British Museum, London. Pp. i–xii, 1–484.
- Scully, J., 1881. A contribution to the ornithology of Gilgit. (Reprint from the "Ibis."). Stray Feathers 10 (1,2&3): 88–146.
- Seebohm, H., 1881. Catalogue of the Passeriformes or Perching birds in the collection of the British Museum, Cichlomorphae: Volume V, Part II. British Museum, London. Pp. i–xvi, 1–426.
- Shah, G. M., 1984. Birds of Hokersar-food, feeding and breeding biology of resident and non-resident birds. PhD Thesis, P. G. Department of Zoology, University of Kashmir.
- Sharma, N., Rana, S. K., Raina, P., Amir, R., & Kichloo, M. A., 2018. An annotated checklist of the birds of upper Chenab catchment, Jammu and Kashmir, India. *Journal of Threatened Taxa* 10 (7): 11869–11894
- Sharma, N., & Rana, S., 2017. Website URL: https://ebird.org/india/view/checklist/ S38681142. [Accessed on 29 October 2021.]
- Sharpe, R. B., 1879. Catalogue of the Passeriformes, or perching birds, in the collection of the British Museum. Cichlomorphae: Part I, containing the families Campophagidae and Muscicapidae. *Catalogue of the Birds in the British Museum* 4: i-xvi, 1–494.
- Sharpe, R. B., 1883. Catalogue of the Passeriformes, or perching birds, in the collection of the British Museum. Cichlomorphae: Part IV, containing the concluding portion of the family *Timeliidae* (babbling thrushes). *Catalogue of the Birds in the British Museum* 7: i-xvi, 1–698.
- Singh, R., 2013. *Plumage across the Pir Panjal: The Poonch and Rajouri Districts.* Samrat Offset Pvt. Ltd. New Delhi.
- SoIB, 2023. State of India's Birds, 2023: Range, trends, and conservation status. The SoIB Partnership. Pp. 119.
- Stattersfield, A. J., Crosby, M. J., Long, M. J., & Wege, D.C., 1998. Endemic Bird Areas of the World: Priorities for Biodiversity Conservation. Cambridge, UK: BirdLife International.
- Suhail, I., Ahmad, R., & Ahmad, K., 2020. Avifaunal diversity in Jammu and Kashmir State. In: Dar G.H., Khuroo A.A., editors. Biodiversity of the Himalaya: Jammu and Kashmir state: Topics in Biodiversity and Conservation. p. 897–931.
- Taylor, B., & Sharpe, C. J., 2020. Kashmir Flycatcher (*Ficedula subrubra*), version 1.0. In Birds of the World (J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi. org/10.2173/bow.kasfly1.01.
- Theobald, H., 1854. Indian Ecology: Notes on the nidification of some common birds of salt range, with few additions from Kashmir. *Journal of the Asiatic Society of Bengal* 23: 589–603.
- Vertnet, 2020. Website URL: http://portal.vertnet.org/search. [Accessed in September 2022.]

Ward, A. E., 1906a. Birds of the provinces of Kashmir and Jammu and adjacent

districts. Part I. Journal of the Bombay Natural History Society 17 (1): 108–113. Ward, A. E., 1906b. Birds of the provinces of Kashmir and Jammu and adjacent

- districts. Part II. Journal of the Bombay Natural History Society 17 (2): 479–485. Ward, A. E., 1907a. Birds of the provinces of Kashmir and Jammu and adjacent districts. Part III. Journal of the Bombay Natural History Society 17 (3): 723–729.
- Ward, A. E., 1907b. Birds of the provinces of Kashmir and Jammu and adjacent districts. Part IV. Journal of the Bombay Natural History Society 17 (4): 943–949.
- Ward, A. E., 1908. Further notes on birds of the provinces of Kashmir and Jammu and adjacent districts. *Journal of the Bombay Natural History Society* 18 (2): 461–464.
- Ward, A. E., 1923. Small game shooting in Kashmir and the adjacent hill provinces. Journal of the Bombay Natural History Society 29 (3): 653–658.
- Whistler, H., 1922. A contribution to the ornithology of Cashmere. *Journal of the Bombay Natural History Society* 28 (4): 990–1006.
- Whistler, H., 1932. On some Larks of the Kashmir State. *Ibis* 74 (3): 470–479.
- Whistler, H., 1936. Arctic Tern in Kashmir. *Ibis* 78 (3): 600–601.
- Yocom, C. F., 1970. Evidence of Canada Geese in Kashmir, India. Murrelet 51: 26.

Appendix A: Notes on the species excluded from the checklist

Canada Goose Branta canadensis

Yocom (1970) reported that one person, Mr. Goroo, and his hunters are believed to have shot a Canada Goose in Kashmir. It was identified by some American hunters. The integrity of the record could not be confirmed, so we excluded the bird from the current checklist.

Mute Swan Cygnus olor

Ward (1907b) listed it as a rare visitor to both Kashmir and Jammu provinces. McMahon (1899) collected two specimens at Chilas, Gilgit (erstwhile Jammu & Kashmir state), now in Ladakh, in December 1897. Both are untraceable. Rasmussen and Anderton (2012) mentioned this bird as a winter vagrant in the Northwest. Due to the lack of any further definitive documentation, we exclude the species from the Jammu & Kashmir list.

Red-breasted Merganser Mergus serrator

The only reference is that of Ward (1907b), who listed it as doubtful for Kashmir.

Rain Quail Coturnix coromandelica

According to Ward (1907b), the bird is a rare visitor to Kashmir, and in June 1904, a large number came near the Manasbal Lake, and several of them remained to breed (Ward 1923). Grimmett et al. (2011) put a question mark on Osmaston's record (Osmaston 1925) near Sanku, Ladakh, but maps the southwestern regions of Jammu as the summer range of the bird. An egg deposited in Naturhistorisches Museum Bern, Switzerland, collected by 'Henrici' on 17 June 1904 from Kashmir, has been disregarded as per the criteria set in the methodology (https://www.gbif.org/ occurrence/2862781945).

Rock Bush-Quail Perdicula argoondah

Ward (1907b) listed this bird without any documentation.

Barred Cuckoo-Dove Macropygia unchall

Though Ali & Ripley (1987) and Roonwal (1941) included Kashmir in its range, Rasmussen & Anderton (2012) has questioned the range statement and does not map for the state. Grimmett et al. (2011) tentatively mapped the species to the state. No actual records traced to date.

Pin-tailed Sandgrouse Pterocles alchata

Ward (1907b) mentioned the bird occurring in Jammu but has not seen it himself. No other proper documentation for this species was found.

Black-bellied Sandgrouse Pterocles orientalis

Ward (1907b) listed the bird for Jammu & Kashmir, but without any details. He also quoted Col. Unwin that the birds are observed in flocks near Pampore in November (Ward 1923). Grimmett et al. (2011) accepted these records. However, descriptive details on identification are lacking in both these documentations.

Painted Sandgrouse Pterocles indicus

Ward (1907b, 1923) mentioned its distribution in Jammu plains. Rasmussen & Anderton (2012) mentioned an unverified old report (probably that of Ward) extending the range in Jammu. Roonwal (1947) excluded Kashmir in its range. Grimmett et al. (2011) puts a question mark for this species in Jammu & Kashmir. Since there are no definitive details related to this species, we exclude the species from the Jammu & Kashmir list.

Fork-tailed Drongo-Cuckoo Surniculus dicruroides

A species that lacks proper evidence but is indicated in the map by Grimmett et al. (2011). It is excluded from the list.

Large Hawk-Cuckoo Hierococcyx sparverioides

Grimmett et al. (2011) mentioned its summer range close to the borders with Pakistan, probably accepting the Thandiani record of Magrath (1908). Ward (1907a) listed the species as doubtful, while Ali & Ripley (1987) listed Kashmir in distribution records. Lawrence (1895) described a *Hierococcyx* sp. with call details pointing towards *H. sparverioides*, but could not confirm the identity. Singh (2013) has a photograph, but the identity is not confirmed. Not explicitly called out in Rasmussen & Anderton (2012). We exclude the species from the list until strong evidence emerges.

Corn Crake Crex crex

The only reference within Jammu & Kashmir is Ward (1907b), who stated the bird is rare but undoubtedly does visit Kashmir. The nearest records are that of Biddulph, who collected a specimen from Gilgit (Biddulph 1881), and Prasad (2012), who photographed it from Tso Moriri on 20 September 2012, both locations are in Ladakh.

Watercock Gallicrex cinerea

A cross mark in the maps of Grimmett et al. (2011) that remains untraced is the only claim for this species from the Jammu & Kashmir.

Red-legged Crake Rallina fasciata

Suhail et al. (2020) included this species for Jammu & Kashmir based on a photograph taken in Srinagar in October 2015 which was later reidentified as a Ruddy-breasted Crake *Zapornia fusca*.

Little Crake Zapornia parva

Ward (1907b) stated that it breeds in Kashmir. No other authority has accepted Ward's report.

Eurasian Thick-knee Burhinus oedicnemus

Lawrence (1895) reported a pair on a stony beach of the Veshau River near Nihama in August 1889, which was the reason for its inclusion in Suhail et al. (2020). Eurasian Thick-knee was, until recently, considered conspecific with Indian Thick-knee *B. indicus*; so this should actually be the Indian Thick-knee.

Grey-headed Lapwing Vanellus cinereus

One solitary bird was seen twice on 08 May 1928 alongside the Sindh River near Ganderbal (Osmaston 1930). Although the authors failed to secure a specimen, they were confident it was a Grey-headed Lapwing. Grimmett et al. (2011) also seem to accept this record, but nothing further on the identifiable description has been provided.

Greater Sand-Plover Anarhynchus leschenaultii

Rasmussen & Anderton (2012) mapped it as a passage migrant through Kashmir. Without any further documentation, we exclude the species from the Jammu & Kashmir checklist.

Red-necked Stint Calidris ruficollis

An isolated record based on the maps Grimmett et al. (2011) provided remains untraced and hence not accepted here.

Yellow-legged Buttonquail Turnix tanki

Eggs are deposited in Western Foundation of Vertebrate Zoology, California, USA, collected by C. H. Gowland on 25 May 1925 from Jammu & Kashmir (urn:catalog:WFVZ:Eggs:20058) (Vertnet 2020) which have been disregarded as per the criteria set in methodology.

Caspian Tern Hydroprogne caspia

Rahmani et al. (2008) reported 100 Caspian Terns at Wular Lake and another 135 individuals at Hokersar Lake. However, they did not mention how they identified these birds. The ID might have been confused with that of Whiskered Tern *Chlidonias hybrida*, a probable bird missing from their list.

Indian Cormorant Phalacrocorax fuscicollis

In Jammu & Kashmir, the major reference to this species is that of Suhail et al. (2020). All the records of Indian Cormorants on eBird were identified as Great Cormorants *P. carbo* and subsequently unconfirmed. To date, we have not come across any substantive evidence of this species from Jammu & Kashmir.

Red-headed Vulture Sarcogyps calvus

Ward (1907a) lists the species as far from common. The only other reference comes from Rahmani et al. (2013) but lacks any specific details about its identification and distribution in the state.

Indian Vulture Gyps indicus

Listed without any details by Adams (1859) and hence not accepted for the Jammu & Kashmir list.

Slender-billed Vulture Gyps tenuirostris

Rahmani et al. (2013) have provided records for Jammu & Kashmir for the species mentioned in Naoroji (2006), which, in turn, relies on Ali & Ripley (1987). However, these records lack sufficient details. Collar (2001) documented the species' westernmost range in Himachal Pradesh and Haryana, disregarding the records from Kashmir. Grimmett et al. (2011) mapped this species as a resident of Jammu & Kashmir, while Rasmussen & Anderton (2012) considered the Kashmir records unsupported. Intesar Suhail (pers obs.) recalls an injured individual which was rescued from Kathua in 2001. However, he could not recollect the details of that individual, and the bird was also not photographed. We exclude the species for Jammu & Kashmir until strong evidence emerges.

Changeable Hawk-Eagle Nisaetus cirrhatus

The only reference is from Ward (1907a) who examined a specimen but doubts the locality assigned to the specimen.

Montagu's Harrier Circus pygargus

Ward (1907a) mentioned Montagu's Harrier to be found in the autumn and winter months but lacked any definitive details. Naoroji (2006) mapped the bird for erstwhile Jammu & Kashmir and Suhail et al. (2020) included the bird based on the maps in Naoroji (2006). Descriptive details are lacking in both references.

Grey-headed Fish-Eagle Icthyophaga ichthyaetus

One specimen, supposed to be from Kashmir, is present in the museum collection of BNHS (Abdulali 1969a; Rahul Khot, in litt., email dated 14 March 2019). The locality is listed as Kishenganga, Kashmir, and it reached BNHS through the Thiruvananthapuram [=Trivandrum] Museum. The provenance of the same could not be confirmed as the collectors of the Thiruvananthapuram Museum restricted themselves mostly to South India. Lacking any conclusive details about the location of the collection, we excluded the record for Jammu & Kashmir.

Pallid Scops-Owl Otus brucei

Ward (1907a) mentioned it to be recorded from the outlying districts towards Gilgit, a part of erstwhile Jammu & Kashmir state and out of the scope of this checklist.

Tawny Fish-Owl Ketupa flavipes

The only reference is from Ward (1907a) who listed it as uncommon in Kashmir. Grimmett et al. (2011) has a question mark for the said record.

Jungle Owlet Glaucidium radiatum

Sharma et al. (2018) reported this bird from the Chenab Valley, but it seems like a case of misidentification with the Asian Barred Owlet *G. cuculoides*. Singh (2013) carried a photograph which also remains unconfirmed.

Himalayan Owl Strix nivicolum

Ward (1907a) listed this bird as less common than other owls in Kashmir. No other evidence supports the presence of the Himalayan Owl in Jammu & Kashmir.

Oriental Pied-Hornbill Anthracoceros albirostris

Roberts (2002) mentioned a sighting of this bird by Major Erkii

Kallio in Mirpur, Poonch, on the Pakistani side of the "Line of Control" (LoC) on 13 March 1999. However, due to the lack of supporting media or detailed notes, this sighting is not considered valid for inclusion in the checklist. We have also disregarded other unlikely species reported by Major Erkii Kallio, including Long-tailed Broadbill *Psarisomus dalhousiae* and European Robin *Erithacus rubecula*.

Stork-billed Kingfisher Pelargopsis capensis

Holmes & Parr (1989) recorded one individual on 16 August 1978 at Haigam Rakh (Hygam Wetland). They believed it to be the same individual as reported by another WWF party at Hokersar Wetland. Without any definitive details about its identification, we excluded the bird from the checklist.

Blue-cheeked Bee-eater Merops persicus

Ward (1907a) mentioned the bird migrating through Jammu & Kashmir but has never seen it himself. Grimmett et al. (2011) mapped it for Ladakh but not for Jammu & Kashmir.

Yellow-rumped Honeyguide Indicator xanthonotus

Ward (1907a) mentioned that this bird was found in the Jhelum Valley and Poonch, although he himself failed to locate it. Grimmett et al. (2011) seems to have accepted the record. There are specimens deposited in the BNHS museum from Hazara and Murree, Pakistan, both places very close to the borders of Jammu & Kashmir. Without any further evidence from Jammu & Kashmir, we excluded it from the checklist.

Laggar Falcon Falco jugger

Listed in Ward (1907a). Suhail et al. (2020) included the bird for Jammu & Kashmir based on the maps in Naoroji (2006). No further details or acceptance by any major authority.

Red-breasted Parakeet Psittacula alexandri

A single individual observed at University of Jammu by Parmil Kumar (Kumar 2016), far from its usual range, was considered an escapee as the individual was not seen on any subsequent surveys.

Long-tailed Broadbill Psarisomus dalhousiae

Roberts (2002) and Grimmett et al. (2008) discussed a sighting reported by Major Erkii Kallio in Kotli, Poonch, located on the Pakistani side of the "Line of Control" (LoC) on 21 August 1999. This sighting, along with the Oriental Pied-Hornbill, was considered the westernmost known occurrence of this bird species in the Himalayas. Grimmett et al. (2008) additionally mentioned the existence of a photograph taken on 21 August 1990, potentially indicating an error in the year (must have been 1999?). To date, no substantial evidence has been obtained to confirm the sighting.

Scarlet Minivet Pericrocotus speciosus

Specimens present in the American Museum of Natural History collected by H. J. Elwes from Jammu & Kashmir in 1880, needed verification (Vertnet 2020). Adams (1859) mentioned the bird being seen in flocks in Kashmir. Adam's birds, we assume, were most likely Long-tailed Minivets *P. ethologus*, a common species missing from their list.

Greater Racket-tailed Drongo Dicrurus paradiseus

A specimen (USNM Birds #335039) deposited in the National Museum of Natural History, Smithsonian Institution collected by Ward (undated) is the only reference to this bird in Jammu & Kashmir (Vertnet 2020). But there is a question mark regarding its locality, hence excluded.

Red-backed Shrike Lanius collurio

A specimen in the BNHS collected from Jammu state near Madhopur, Gurdaspur (BNHS #17051) is that of an Isabelline Shrike *L. isabellinus* as the two were considered conspecific in the past. Eggs are deposited in the Royal Ontario Museum, Canada, collected from Ladakh (ROM Birds #506874). The latter record is outside of the geographical limits of Jammu & Kashmir.

Grey-crested Tit Lophophanes dichrous

Ward (1906a) had examined a specimen collected from Kishtwar but doubted its locality. There are two specimens in NHMUK collected by W. S. C. Pinwill from 'NW Himalayas'. Ali & Ripley (1987) listed 'Eastern Kashmir' in its distribution range. Grimmett et al. (2011) maps included areas of Jammu Province, Kishtwar, and Doda in its range, probably accepting Ward's record. Rasmussen & Anderton (2012) accepted some south Kashmir records which may either be based on Ward's records of doubtful origin (Tim Inskipp, in litt., e-mail dated 21 September 2023) or Pinwill's specimens. Based on these records' doubtful origins, we did not accept the species for Jammu & Kashmir.

Desert Lark Ammomanes deserti

Ali & Ripley (1987) and Suhail et al. (2020) included the species for Jammu & Kashmir. Kashmir is also considered the type locality for this species (Blyth 1853). However, it hasn't been recorded anywhere near this area except for a specimen in NHMUK, supposedly from Kashmir. This obfuscates the origin of the specimen described by Blyth. Rasmussen & Anderton (2012) extensively examined the specimens at NHMUK, and concluded, 'reported S Kashmir, where verification needed'. No verified records could be found and hence, we exclude it from our checklist.

West Himalayan Bush Warbler Locustella kashmirensis

Ward (1906a) listed the bird as recorded from Kashmir. Ali & Ripley (1987) mentioned two old specimens in NHMUK, while Rasmussen & Anderton (2012) suggested that those specimens warrant verification. Grimmett et al. (2011) also puts a question mark on Kashmir records. No specimens were found with 'Kashmir' on the label in NHMUK (Hein Van Grouw, in litt., email dated 21 March 2019) and hence these records are not accepted.

Yellow-browed Warbler *Phylloscopus inornatus*

Specimens deposited in USNM (urn:uuid:73d83e23-1999-42cd-b38a-c06a7d32d893), Field Museum of Natural History (Vertnet 2020) and Western Foundation of Vertebrate Zoology (urn:catalog:WFVZ:Eggs:184296), US are all likely to be Hume's Warbler *P. humei* as the two were considered conspecific. Many birds are believed to have been ringed in the years 1970-71

in Kashmir during the Migratory Animal Pathological Survey by U.S. Army Research and Development Group (McClure & Leelavit 1972). Holmes & Parr (1989) reported single individuals on multiple occasions (September 1983 and 1984). Again, it is likely that both these studies point to Hume's Warbler.

Plain Leaf Warbler Phylloscopus neglectus

Eggs deposited in NHMUK (NHMUK: ecatalogue:3793923, NHMUK: ecatalogue:3793920) (Vertnet 2020) with a question mark against the bird's name. Alexander's records (Alexander 1950) are most likely misidentified Tytler's Leaf Warbler *P. tytleri*. Grimmett et al. (2011) mapped some independent records from Jammu & Kashmir. However, Rasmussen & Anderton (2012) says breeding records for Kashmir are misidentifications.

Green-crowned Warbler Phylloscopus burkii

Two birds ringed in 1970 during the Migratory Animal Pathological Survey by U.S. Army Research and Development Group (McClure & Leelavit 1972), were most likely Whistler's Warbler *P. whistleri*. Both taxa were then considered conspecific and Whistler's Warbler is an expected species missing in their list.

Indian Nuthatch Sitta castanea

Eggs are deposited in the NHMUK (NHMUK: ecatalogue: 3799245) (Vertnet 2020). We have declined all the records based on egg collection.

Long-billed Thrush Zoothera monticola

NHMUK catalogue (Seebohm 1881) mentioned that this species breeds in the Himalaya from Assam westwards, almost to Kashmir. Due to the lack of any specimen or media record, we did not accept it in our checklist.

Snowy-browed Flycatcher Ficedula hyperythra

Kashmir Flycatcher *F. subrubra* was initially named *Siphia hyperythra*, but that name was already in use (Taylor & Sharpe 2020), leading to a renaming as *F. hyperythra*. Hence, Kashmir specimens in NHMUK (Sharpe 1879) and USNM (Richmond 1895) and records by Ward (1908), who found a clutch of four eggs in Lidder Valley on 15 June 1907, labeled as *S. hyperythra* and *F. hyperythra*, were in fact of Kashmir Flycatcher and not this species.

Little Pied Flycatcher Ficedula westermanni

A photograph by Singh (2013) seems to be a case of a misidentified female Blue-capped Redstart *Phoenicurus coeruleocephala*. Hussain & Kait (2013) reported it from Tehsil Mendhar of Poonch District but did not describe it. J&K Department of Wildlife Protection (2023), and Suhail et al. (2020) also included it in their list without any details.

European Robin Erithacus rubecula

Roberts (2002) reported a bird sighting in the year 1999 made by Major Erkii Kallio in Rajouri. This information was conveyed to Sudhir Vyas, the Indian Deputy High Commissioner in Islamabad at the time. In an email exchange with Praveen J. (in litt.), Sudhir Vyas expressed a leaning towards accepting the record. However, details about the potential confusion with other species, such as Red-breasted Flycatcher *F. parva* or Kashmir Flycatcher or even a female Blue-throated Flycatcher *Cyornis rubeculoides*, were not provided in detail. This would also be the first record for India and has not been accepted by Praveen & Jayapal (2024) and hence not here as well.

Eurasian Tree Sparrow Passer montanus

Ward (1906b) listed the bird without any further details. Grimmett et al. (2011) mapped an independent record from the southern districts of Jammu, which remained untraced by us. Not accepted by other authorities and hence excluded from the list.

Meadow Pipit Anthus pratensis

Magrath (1921) reported a 'different' pipit among the Rosy Pipits *A. roseatus* near Gangabal Lake, believed to be a Meadow Pipit, but failed to collect a specimen or provide sufficient description.

Spot-winged Grosbeak Mycerobas melanozanthos

Ward (1906b) mentioned 'recorded this from various parts' and Lawrence (1895) listed the species as very rare in Kashmir forests. Neither provided details about specific records. These above two mentions are likely to be the sources of its doubtful status in Grimmett et al. (2011). There are no other references to specific records within in J & K.

Great Rosefinch Carpodacus rubicilla

Ward (1906b) mentioned a single specimen but doubted its locality to be from Kashmir proper. However, he says that the bird was found towards the Ladakh boundary. This is considered insufficient for acceptance.

Gold-naped Finch Pyrrhoplectes epauletta

An egg deposited in NHMUK (NHMUK: ecatalogue:3819660) (Vertnet 2020) is the only evidence and hence not accepted here.

Grouping and home-range of the Vulnerable Great Slaty Woodpecker *Mulleripicus pulverulentus* in the western Himalaya

Sarabjeet Kaur, Govindan Veeraswami Gopi & Virendra Prasad Uniyal

Kaur S., Gopi G.V., & Uniyal V.P., 2024. Grouping and home-range of the Vulnerable Great Slaty Woodpecker *Mulleripicus pulverulentus* in the western Himalaya. *Indian BIRDS* 19 (6): 180–184.

Sarabjeet Kaur, Department of Endangered Species Management, Wildlife Institute of India, Dehradun, 248001, Uttarakhand, India. Email: 23tanyanarula@gmail.com [Corresponding author]

Govindan Veeraswami Gopi, Scientist-F, Department of Endangered Species Management, Wildlife Institute of India, Dehradun, 248001, Uttarakhand, India. Virendra Prasad Uniyal, Former Scientist-F, Department of Landscape Level Planning and Management, Wildlife Institute of India, Dehradun – 248001, Uttarakhand, India.

Abstract

This study highlights the census, grouping and home-range size of the Great Slaty Woodpecker *Mulleripicus pulverulentus* in Sal *Shorea robusta* forests in Pawalgarh Conservation Reserve, Uttarakhand, India over two breeding and post-breeding seasons (2018–2020). The population is represented by 14 groups with a total of 63 individuals occurring in groups of 3–7 individuals. We mapped sightings (n=161; 11 groups) obtained during systematic transect walks to assess the distribution and abundance of the species within the study area and adjacent forest. Our observations were based on the repetitive encounters of individuals of all family groups, and we found that each group established and maintained the same territories in the successive years to meet their foraging and nesting needs. The mean home range of the species in the Sal forest was 1.87±0.97 sq. km based on the minimum convex polygon method across the two seasons ranging from 0.77 to 4.08 sq. km. Each family group of Great Slaty Woodpeckers actively defended minimal overlapping territories throughout the years. Additionally, we observed an interesting intraspecific behaviour which we term as "Inflight Dance" with respect to territoriality wherein two-family groups with overlapping boundaries would engage in a circular flight movement during the breeding season. This study on the home range is a first attempt in the region and represents an important ecological baseline for this vulnerable species.

Introduction

Many bird species defend resource-based territories (Holmes et al. 1989; Winker et al. 1990). For example, a study on movement patterns of adult and juvenile 'Akohekohe' *Palmeria dolei*, an endangered Hawaiian honeycreeper revealed significant differences in the home ranges of adult and juvenile individuals, which in turn are attributed to the increased risk of malarial infection (Wang et al. 2020). The home range size and social interaction of the Black Woodpecker *Dryocopus martius* revealed significant variation among individuals (Bocca et al. 2007). Their analysis also pointed out that home ranges during the breeding period were more restricted than the post-breeding period. The overlap of home-ranges was prominent and broad in comparison to the core area overlap with a high site-fidelity across all-year ranges. Similarly, a radio-telemetry study of the Australian owletnightjars *Aegotheles cristatus* in a *Eucalyptus* woodland coupled with GPS recordings revealed home range size requirements and site fidelity of this highly territorial bird did not differ seasonally and were not correlated with arthropod abundance (Doucette 2010). The movement ecology and other life history parameters such as home range (Franzreb 2006), reproductive success (Nappi & Drapeau 2009), and space use of foraging habitat (Walters et al. 2002) have been widely used as indicators for implementing suitable habitat management practices for woodpeckers such as the Red-cockaded Woodpecker *Dryobates borealis* and Blackbacked Woodpecker *Picoides arcticus*. Data on movements