



ISSN 0974-7907 (Online)
ISSN 0974-7893 (Print)

THREAT STATUS OF BIRDS OF YAMUNA NAGAR DISTRICT, HARYANA, INDIA

Rajiv S. Kalsi¹, Sujata Sharma² & Meenu Kalsi³

^{1,3} Department of Zoology, M.L.N. College, Yamuna Nagar, Haryana 135001, India

² Department of Biology, Sacred Heart Convent Senior Secondary School, Jagadhri, Haryana 135001, India

¹ rajivkalsi@yahoo.com (corresponding author), ² sssujatasharma@gmail.com, ³ meenu.kalsi@gmail.com

OPEN ACCESS

Abstract: Birds were surveyed in the Yamuna Nagar District, Haryana, India and the threat categories of the species observed were determined with the IUCN Red List. A total of 185 species belonging to 46 families were observed. Families Accipitridae, Passeridae, Corvidae and Scolopacidae dominated the list. There were 13 species with various IUCN Red List categories. One Critically Endangered species, the Red-headed Vulture *Sarcogyps calvus*, and two Endangered species Black-bellied Tern *Sterna acuticauda* and Egyptian Vulture *Neophron percnopterus* were observed. A prerequisite for all the measures focussed on management and conservation of species is that the status and population trends of the target species must be known, and future work should be in this direction.

Keywords: Birds, IUCN Red List, northern India, population status, Yamuna Nagar.

The Yamuna Nagar District (30°7'12"N & 77°16'48"E) lies in northern tip of the state of Haryana (Fig. 1) in northern India. This district (Fig. 2) of 1756km² area is bound by the states of Himachal Pradesh in the north, Uttar Pradesh in the east and Punjab in the west. The total human population of the district was 12,14,205 (2011 Census data). Primarily an agriculture dominant area (Total cultivated area = 1260km², District

Yamuna Nagar website <http://yamunanagar.nic.in/ynr/knowYamunanagar.asp#>), the district has 150km² of forest area and 346km² of non-cultivable area (District Yamuna Nagar website <http://yamunanagar.nic.in/ynr/knowYamunanagar.asp#>). Maize and rice are the main kharif crops while wheat and potato are the main Rabi crops. Sugarcane is also cultivated on a large scale in the district. The main forest types in the district are dry shiwalik sal forest, northern dry mixed deciduous forest, dry deciduous scrub forest, and dry bamboo forest. The Yamuna River and the Western Yamuna Canal flow along the eastern edge of the district. There are three seasons: the hot season starts from mid March to last week of June followed by the southwest monsoon which lasts up to September. The transition period from September to November forms the post monsoon season. The winter season starts late in November and lasts up to the first week of March. The mean maximum temperature in the months of May and June is 48.6°C, and the mean minimum temperature is 6.8°C in the month of January. Mean annual rainfall in the district is 1100mm. The district with its diversity of habitats and proximity to hill areas in the north, harbours a diversity of birdlife. This paper reports on some bird species found in the district along with their threat status.



DOI: <http://dx.doi.org/10.11609/JoTT.o4034.7024-8> | **ZooBank:** urn:lsid:zoobank.org:pub:ABFBDEA3-5059-4EBD-A92D-AE680041BEBF

Editor: Nishith Dharaiya, HNG University, Patan, India.

Date of publication: 26 March 2015 (online & print)

Manuscript details: Ms # o4034 | Received 18 May 2014 | Final received 09 March 2015 | Finally accepted 11 March 2015

Citation: Kalsi, R.S., S. Sharma & M. Kalsi (2015). Threat status of birds of Yamuna Nagar District, Haryana, India. *Journal of Threatened Taxa* 7(3): 7024–7028; <http://dx.doi.org/10.11609/JoTT.o4034.7024-8>

Copyright: © Das & Gupta 2015. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use of this article in any medium, reproduction and distribution by providing adequate credit to the authors and the source of publication.

Funding: M.L.N. College, Yamuna Nagar, Haryana provided necessary facilities.

Competing Interest: The authors declare no competing interests.

Acknowledgements: We are thankful to the Principals, M.L.N. College, Yamuna Nagar, Haryana, and Sacred Heart Convent Senior Secondary School, Jagadhri, Haryana for providing facilities.





Figure 1. Location of Yamuna Nagar District in the Haryana State

METHODS

Surveys were conducted in different areas of the district in the years 2012 and 2013. The areas were selected to include diverse habitat types like forested area, grassland, agriculture, wetland, fallow land, parks, western Yamuna Canal, river Yamuna and human habitations. All the habitat categories were visited twice every month from January to December and birds were identified using a pair of binoculars (Olympus 8x40) and standard field guides on birds. During surveys, birds were identified while being stationary and while walking slowly on paths and trails through the various habitat categories. The nomenclature of various species in the checklist follows Grimmett et al. (1998), and Kazmierczak & van Perlo (2000). The reported data on threat status of all the species observed was downloaded from the IUCN Red List (IUCN 2013).

RESULTS

We observed 185 species of birds belonging to 46 families (Fig. 4, Appendix 1). The dominant families in the list were Accipitridae and Passeridae (15 species each), Corvidae (14 species), and Scolopacidae (13 species).

As per IUCN RedList (IUCN 2013) threat categories, 13 species in the area were threatened. Red-headed Vulture *Sarcogyps calvus* was Critically Endangered, and two species (Black-bellied Tern *Sterna acuticauda* and Egyptian Vulture *Neophron percnopterus*) were Endangered (Fig. 3). Two species, Pallas’s Fish-Eagle *Haliaeetus leucoryphus* and Greater Spotted Eagle

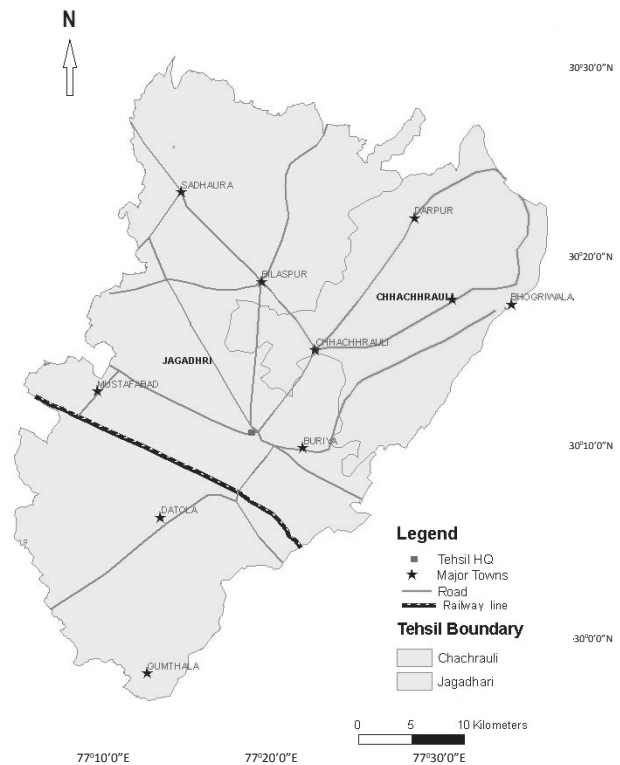


Figure 2. Yamuna Nagar District

Aquila clanga were in the Vulnerable category and eight species were Nearly Threatened (Fig. 3, Appendix 1). There were 172 species with Least Concern status.

DISCUSSION

Thirteen species with various IUCN Red List (IUCN 2013) threat categories were observed in the district. Out of these, eight species namely Black-bellied Tern, Black-tailed Godwit, Eurasian Curlew, River Lapwing, River Tern, Darter, Black-headed Ibis, Painted Stork and Pallas’s Fish-Eagle are either waders or wetland

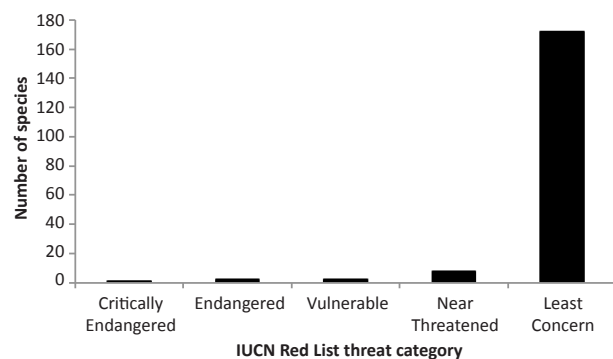


Figure 3. Number of bird species according to IUCN Red List threat categories in the Yamuna Nagar District.

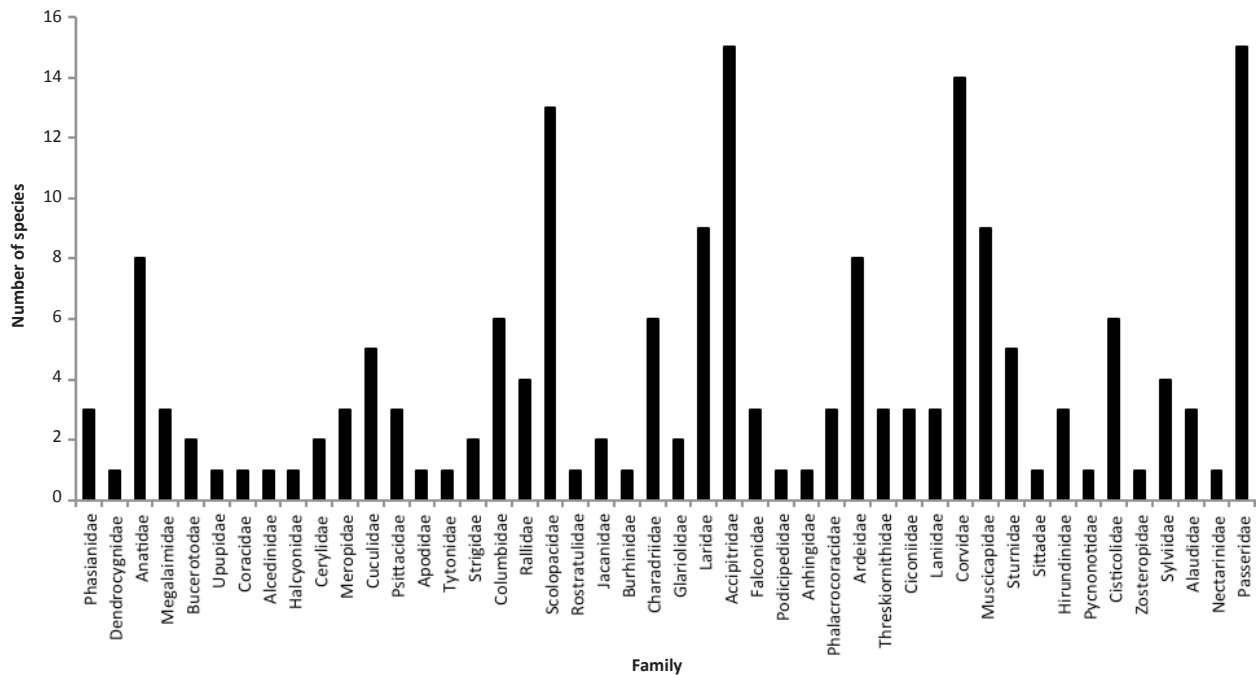


Figure 4. Number of bird species according to families observed in the Yamuna Nagar District.

obligatory species. A majority of species were in the least concern category. A prerequisite for all the measures focussed on management and conservation of species is that the status and population trends of the target species must be known, and all future work should be in this direction.

REFERENCES

Grimmett, R., C. Inskipp & T. Inskipp (1998). *Birds of the Indian Subcontinent*. Oxford University Press, New Delhi, 888pp.
 IUCN (2013). The IUCN Red List of Threatened Species. Version 2013.2. <<http://www.iucnredlist.org>>. Downloaded on 21 November 2013.
 Kazmierczak, K. & B. van Perlo (2000). *A Field Guide to the Birds of the Indian Subcontinent*. Yale University Press. 352pp.

Appendix 1. Checklist of birds of district Yamuna Nagar, Haryana, along with their IUCN Red List status.

	Common name	Scientific name	IUCN Red List status*
Phasianidae			
1	Grey Francolin	<i>Francolinus pondicerianus</i>	LC
2	Black Francolin	<i>Francolinus francolinus</i>	LC
3	Indian Peafowl	<i>Pavo cristatus</i>	LC
Dendrocygnidae			
4	Lesser Whistling-duck	<i>Dendrocyna javanica</i>	LC
Anatidae			
5	Spot-billed Duck	<i>Anas poecilorhyncha</i>	LC
6	Common Pochard	<i>Aythya ferina</i>	LC
7	Northern Pintail	<i>Anas acuta</i>	LC
8	Northern Shoveler	<i>Anas clypeata</i>	LC
9	Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC
10	Red-crested Pochard	<i>Rhodonessa rufina</i>	LC
11	Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC
12	Common Teal	<i>Anas crecca</i>	LC

	Common name	Scientific name	IUCN Red List status*
Megalaimidae			
13	Coppersmith Barbet	<i>Megalaima haemacephala</i>	LC
14	Brown-headed Barbet	<i>Megalaima zeylanica</i>	LC
15	Lineated Barbet	<i>Megalaima lineata</i>	LC
Bucerotidae			
16	Indian Grey Hornbill	<i>Ocyroceros birostris</i>	LC
17	Oriental Pied Hornbill	<i>Anthracoceros albirastris</i>	LC
Upupidae			
18	Common Hoopoe	<i>Upopa epops</i>	LC
Coraciidae			
19	Indian Roller	<i>Coracias benghalensis</i>	LC
Alcedinidae			
20	Common Kingfisher	<i>Alcedo atthis</i>	LC
Halcyonidae			
21	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	LC

	Common name	Scientific name	IUCN Red List status*
Cerylidae			
22	Crested Kingfisher	<i>Megaceryle lugubris</i>	LC
23	Pied Kingfisher	<i>Ceryle rudis</i>	LC
Meropidae			
24	Green Bee-eater	<i>Merops orientalis</i>	LC
25	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	LC
26	Blue-tailed Bee-eater	<i>Merops philippinus</i>	LC
Cuculidae			
27	Pied Cuckoo	<i>Clamator jacobinus</i>	LC
28	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	LC
29	Indian Cuckoo	<i>Cuculus micropterus</i>	LC
30	Asian Koel	<i>Eudynamis scolopacea</i>	LC
31	Greater Coucal	<i>Centropus sinensis</i>	LC
Psittacidae			
32	Alexandrine Parakeet	<i>Psittacula eupatria</i>	NT
33	Rose-ringed Parakeet	<i>Psittacula krameri</i>	LC
34	Slaty-headed Parakeet	<i>Psittacula himalayana</i>	LC
Apodidae			
35	House Swift	<i>Apus affinis</i>	LC
Tytonidae			
36	Barn Owl	<i>Tyto alba</i>	LC
Strigidae			
37	Eurasian Eagle Owl	<i>Bubo bubo</i>	LC
38	Spotted Owlet	<i>Athene brama</i>	LC
Columbidae			
39	Rock Pigeon	<i>Columbia livia</i>	LC
40	Spotted Dove	<i>Streptopelia chinensis</i>	LC
41	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	LC
42	Yellow-footed Green Pigeon	<i>Treron phoenicoptera</i>	LC
43	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	LC
44	Red Collared-Dove	<i>Streptopelia tanquebarica</i>	LC
Rallidae			
45	Common Coot	<i>Fulica atra</i>	LC
46	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC
47	Common Moorhen	<i>Gallinula chloropus</i>	LC
48	Purple Swampphen	<i>Porphyrio porphyrio</i>	LC
Scolopacidae			
49	Common Snipe	<i>Gallinago gallinago</i>	LC
50	Marsh Sandpiper	<i>Tringa stagnatilis</i>	LC
51	Common Sandpiper	<i>Actitis hypoleucos</i>	LC
52	Little Stint	<i>Calidris minuta</i>	LC
53	Ruff	<i>Philomachus pugnax</i>	LC
54	Black-tailed Godwit	<i>Limosa limosa</i>	NT
55	Eurasian Curlew	<i>Numenius arquata</i>	NT
56	Spotted Redshank	<i>Tringa erythropus</i>	LC
57	Common Greenshank	<i>Tringa nebularia</i>	LC
58	Green Sandpiper	<i>Tringa ochropus</i>	LC
59	Wood Sandpiper	<i>Tringa glareola</i>	LC
60	Common Redshank	<i>Tringa totanus</i>	LC
61	Temminck's Stint	<i>Calidris temminckii</i>	LC
Rostratulidae			
62	Greater Painted-Snipe	<i>Rostratula benghalensis</i>	LC

	Common name	Scientific name	IUCN Red List status*
Jacaniidae			
63	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC
64	Bronze-winged Jacana	<i>Metapodius indicus</i>	LC
Burhinidae			
65	Eurasian Thick-knee	<i>Burhinus oedicnemus</i>	LC
Charadriidae			
66	Kentish Plover	<i>Charadrius alexandrinus</i>	LC
67	Black-winged Stilt	<i>Himantopus himantopus</i>	LC
68	Little Ringed Plover	<i>Charadrius dubius</i>	LC
69	Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	LC
70	Red-wattled Lapwing	<i>Vanellus indicus</i>	LC
71	River Lapwing	<i>Vanellus duvaucelii</i>	NT
Glariolidae			
72	Oriental Pratincole	<i>Glareola maldivarum</i>	LC
73	Small Pratincole	<i>Glareola lactea</i>	LC
Laridae			
74	Black-bellied Tern	<i>Sterna acuticauda</i>	EN
75	Pallas's Gull	<i>Larus ichthyaetus</i>	LC
76	Black-headed Gull	<i>Larus ridibundus</i>	LC
77	Gull-billed Tern	<i>Gelochelidon nilotica</i>	LC
78	Little Tern	<i>Sterna albifrons</i>	LC
79	River Tern	<i>Sterna aurantia</i>	NT
80	Yellow-legged Gull	<i>Larus cachinnans</i>	LC
81	Brown-headed Gull	<i>Larus brunnecephalus</i>	LC
82	Whiskered Tern	<i>Chlidonias hybrida</i>	LC
Accipitridae			
83	Red-headed Vulture	<i>Sarcogyps calvus</i>	CR
84	Egyptian Vulture	<i>Neophron percnopterus</i>	EN
85	Brahminy Kite	<i>Haliastur indus</i>	LC
86	Pallas's Fish-Eagle	<i>Haliaeetus leucoryphus</i>	VU
87	Greater Spotted Eagle	<i>Aquila clanga</i>	VU
88	Osprey	<i>Pandion haliaetus</i>	LC
89	Eurasian Griffon	<i>Gyps fulvus</i>	LC
90	Eurasian Marsh Harrier	<i>Circus aeruginosus</i>	LC
91	Black-shouldered Kite	<i>Elanus caeruleus</i>	LC
92	Crested Serpent Eagle	<i>Spilornis cheela</i>	LC
93	Shikra	<i>Accipiter badius</i>	LC
94	Eurasian Sparrowhawk	<i>Accipiter nisus</i>	LC
95	Oriental Honey-Buzzard	<i>Pernis ptilorhynchus</i>	LC
96	White-eyed Buzzard	<i>Butastur teesa</i>	LC
97	Black Kite	<i>Milvus migrans</i>	LC
Falconidae			
98	Common Kestrel	<i>Falco tinnunculus</i>	LC
99	Red-necked Falcon	<i>Falco chicquera</i>	LC
100	Merlin	<i>Falco columbarius</i>	LC
Podicipedidae			
101	Little Grebe	<i>Tachybaptus ruficollis</i>	LC
Anhingidae			
102	Darter	<i>Anhinga melanogaster</i>	NT
Phalacrocoracidae			
103	Great Cormorant	<i>Phalacrocorax carbo</i>	LC
104	Little Cormorant	<i>Phalacrocorax niger</i>	LC
105	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC

	Common name	Scientific name	IUCN Red List status*
Ardeidae			
106	Intermediate Egret	<i>Mesophoyx intermedia</i>	LC
107	Black-Crowned Night Heron	<i>Nycticorax nycticorax</i>	LC
108	Purple Heron	<i>Ardea purpurea</i>	LC
109	Little Egret	<i>Egretta garzetta</i>	LC
110	Cattle Egret	<i>Bubulcus ibis</i>	LC
111	Great Egret	<i>Casmerodius albus</i>	LC
112	Indian Pond Heron	<i>Ardeola grayii</i>	LC
113	Grey Heron	<i>Ardea cinerea</i>	LC
Threskiornithidae			
114	Black Ibis	<i>Pseudibis papillosa</i>	LC
115	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT
116	Eurasian Spoonbill	<i>Platalea leucorodia</i>	LC
Ciconiidae			
117	Woolly-necked Stork	<i>Ciconia episcopus</i>	LC
118	Painted Stork	<i>Mycteria leucocephala</i>	NT
119	Asian Openbill	<i>Anastomus oscitans</i>	LC
Laniidae			
120	Southern Grey Shrike	<i>Lanius meridionalis</i>	LC
121	Bay-backed Shrike	<i>Lanius vittatus</i>	LC
122	Long-tailed Shrike	<i>Lanius schach</i>	LC
Corvidae			
123	Rufous Treepie	<i>Dendrocitta vagabunda</i>	LC
124	House Crow	<i>Corvus splendens</i>	LC
125	Large-billed Crow	<i>Corvus macrorhynchos</i>	LC
126	Eurasian Golden Oriole	<i>Oriolus oriolus</i>	LC
127	Small Minivet	<i>Pericrocotus cinnamomeus</i>	LC
128	Short-billed Minivet	<i>Pericrocotus brevirostris</i>	LC
129	Scarlet Minivet	<i>Pericrocotus flammeus</i>	LC
130	White-browed Fantail	<i>Rhipidura aureola</i>	LC
131	Asian Paradise-Flycatcher	<i>Terpsiphone paradisi</i>	LC
132	Common Woodshrike	<i>Tephrodornis pondicerianus</i>	LC
133	Black-hooded Oriole	<i>Oriolus xanthornus</i>	LC
134	Black Drongo	<i>Dicrurus macrocercus</i>	LC
135	White-bellied Drongo	<i>Dicrurus caerulescens</i>	LC
136	Common Iora	<i>Aegithina tiphia</i>	LC
Muscicapidae			
137	Verditer Flycatcher	<i>Eumyias thalassina</i>	LC
138	Oriental Magpie-Robin	<i>Copsychus saularis</i>	LC
139	Indian Robin	<i>Saxicoloides fulicata</i>	LC
140	Black Redstart	<i>Phoenicurus ochrurus</i>	LC
141	White-capped Water Redstart	<i>Chaimarrornis leucocephalus</i>	LC
142	Plumbeous Water Redstart	<i>Rhyacornis fuliginosus</i>	LC
143	Common Stonechat	<i>Saxicola torquata</i>	LC
144	Pied Bushchat	<i>Saxicola caprata</i>	LC
145	Brown Rock-Chat	<i>Cercomela fusca</i>	LC
Sturnidae			
146	Asian Pied Starling	<i>Sturnus contra</i>	LC

	Common name	Scientific name	IUCN Red List status*
147	Common Myna	<i>Acridotheres tristis</i>	LC
148	Bank Myna	<i>Acridotheres ginginianus</i>	LC
149	Brahminy Starling	<i>Sturnus pagodarum</i>	LC
150	Common Starling	<i>Sturnus vulgaris</i>	LC
Sittidae			
151	Wallcreeper	<i>Tichodroma muraria</i>	LC
Hirundinidae			
152	Plain Martin	<i>Riparia paludicola</i>	LC
153	Wire-tailed Swallow	<i>Hirundo smithii</i>	LC
154	Red-rumped Swallow	<i>Hirundo daurica</i>	LC
Pycnonotidae			
155	Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC
Cisticolidae			
156	Jungle Prinia	<i>Prinia sylvatica</i>	LC
157	Zitting Cisticola	<i>Cisticola juncidis</i>	LC
158	Rufous-fronted Prinia	<i>Prinia buchanani</i>	LC
159	Grey-breasted Prinia	<i>Prinia hodgsonii</i>	LC
160	Ashy Prinia	<i>Prinia socialis</i>	LC
161	Plain Prinia	<i>Prinia inornata</i>	LC
Zosteropidae			
162	Oriental White-eye	<i>Zosterops palpebrosus</i>	LC
Sylviidae			
163	Common Tailorbird	<i>Orthotomus sutorius</i>	LC
164	Yellow-eyed Babbler	<i>Chrysomma sinense</i>	LC
165	Common Babbler	<i>Turdoides caudatus</i>	LC
166	Jungle Babbler	<i>Turdoides striatus</i>	LC
Alaudidae			
167	Crested Lark	<i>Galerida cristata</i>	LC
168	Oriental Skylark	<i>Alauda gulgula</i>	LC
169	Ashy-crowned Sparrow Lark	<i>Eremopterix grisea</i>	LC
Nectarinidae			
170	Purple Sunbird	<i>Nectarinia asiatica</i>	LC
Passeridae			
171	House Sparrow	<i>Passer domesticus</i>	LC
172	White Wagtail	<i>Motacilla alba</i>	LC
173	Yellow Wagtail	<i>Motacilla flava</i>	LC
174	Chestnut-shouldered Petronia	<i>Petronia xanthocollis</i>	LC
175	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC
176	Citrine Wagtail	<i>Motacilla citreola</i>	LC
177	Grey Wagtail	<i>Motacilla cinerea</i>	LC
178	Paddyfield Pipit	<i>Anthus rufulus</i>	LC
179	Tawny Pipit	<i>Anthus campestris</i>	LC
180	Black-breasted Weaver	<i>Ploceus benghalensis</i>	LC
181	Streaked Weaver	<i>Ploceus manyar</i>	LC
182	Baya Weaver	<i>Ploceus philippinus</i>	LC
183	Red Avadavat	<i>Amandava amandava</i>	LC
184	Indian Silverbill	<i>Lonchura malabarica</i>	LC
185	Scaly-breasted Munia	<i>Lonchura punctulata</i>	LC

*IUCN Red List status: CR - Critically Endangered, EN - Endangered, VU - Vulnerable, NT - Near Threatened, LC - Least Concern

