

## BIRDS OF SUHELDEV WILDLIFE SANCTUARY, BALRAMPUR AND SHRAVASTI DISTRICTS, UTTAR PRADESH, INDIA

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The paper deals with the avifauna of Suheldev, also called Suhelwa, Wildlife Sanctuary, Uttar Pradesh, based on a study carried out from November 2013 to November 2014. The primary focus of the study was to make an inventory of the birds of the Sanctuary with special reference to ascertaining the status of threatened species of the area. A total of 298 bird species were recorded during the study, including 3 Critically Endangered, 3 Endangered, 7 Vulnerable, and 16 Near Threatened species.

### INTRODUCTION

Suheldev Wildlife Sanctuary is a part of the Terai Arc Landscape and has been designated as an Important Bird Area (UP-23), based on the presence of threatened and biome-restricted species (Islam and Rahmani 2004; Rahmani *et al.* 2011). The Sanctuary was considered as a Data Deficient site for birds (Islam and Rahmani 2004), with only a basic listing of species given in the Sanctuary's Management Plan (2011–12 to 2020–21). To fill this lacuna, we undertook an intensive one year study, covering all areas and habitats of the sanctuary, to document the avifauna, with special reference to threatened species.

### STUDY AREA

Suheldev Wildlife Sanctuary (27° 30' 1"–27° 55' 42" N; 81° 55' 36"–82° 48' 33" E), flanked by Nepal on three sides, lies immediately south of Churia hills in Nepal. It is situated in the Tulsipur *tehsil* of Balrampur district and Bhinga *tehsil* of Shravasti district in Uttar Pradesh, India. The area primarily comprises rugged mountains and boulder-strewn riverbeds, especially along the northern boundary. It is contiguous with the forests of Dang in Nepal, and is connected to Banke National Park, which is part of the Bardia forest complex of Nepal. The area is drained by 8–10 major seasonal rivers, many of which flow into artificial reservoirs built along the southern boundary of the Sanctuary (Chanchani *et al.* 2014).

The Sanctuary, approximately 120 km long and 6–8 km wide, is situated at elevations of 120–202 m above msl, and has a core area of 45,200 ha and a buffer zone of 23,000 ha. It is divided into seven ranges: five ranges constituting the core area and two ranges occurring in the buffer area. The West Sohelwa and East Sohelwa ranges are in Shravasti district,

while the rest are in Balrampur district. All the ranges are further divided into beats and compartments.

The area receives around 1,300 mm rainfall. There are 11 tanks and reservoirs in and around the Sanctuary, namely Motipur, Rampur, Vanghohwa, Khairman, Girgitahi, Ganeshpur, Baghelkhand, Bhagwanpur, Majgaowan, Chittaurgarh, and Kohargaddi. Most of the reservoirs tend to dry up by the end of February, except for the Chittaurgarh and Kohargaddi reservoirs, which are large and present near the forest areas. These two reservoirs are the main water sources for wildlife in the Sanctuary. However, the Irrigation Department tries to maintain about 50–60 cm water level in at least one-third area of most of the reservoirs for use during the dry season. The reservoirs with their seepage areas and other water bodies, ranging from 3 ha to 900 ha, support a variety of waterbirds especially during winter.

The Sanctuary falls under the Terai-Bhabhar biogeographic subdivision of the Upper Gangetic Plain (7A), according to the biogeographic classification of Rodgers and Panwar (1988). It is characterized by elements of the Bhabhar zone, typified by porous rocky riverbeds and undulating terrain along the Himalayan foothills. Terai habitats such as tall wet grass stands are absent in Suheldev. The tropical moist deciduous forest is dominated by *Sal Shorea robusta* interspersed with *Syzygium cumini*, *Terminalia tomentosa*, *Acacia catechu*, and grass species of *Vetiveria*, *Themeda*, *Imperata*, *Saccharum*, and *Arundo*. Teak *Tectona grandis* was raised by the Forest Department in the past, but planting stopped after the declaration of the Sanctuary. The unique geophysical attributes of the area, its plantation history, and the numerous drainages and reservoirs have given rise to a mosaic of varied forest types such as sal, teak, broadleaf moist deciduous, and semi-evergreen, with small patches of grassland fringing the reservoirs.

Nearly 40 species of mammals, including the tiger *Panthera tigris*, are found in the Sanctuary, although there has been a significant decline in the tiger population (Johnsingh *et al.* 2004). Large prey species such as chital *Axis axis*, wild boar *Sus scrofa*, nilgai *Boselaphus tragocamelus*, sambar *Rusa unicolor*, barking deer *Muntiacus muntjak*, and hog deer *Axis porcinus* appear to be rare in Suheldev. Leopard *Panthera pardus* and striped hyena *Hyaena hyaena* appear to be widely distributed. Studies by Jhala *et al.* (2008), Johnsingh *et al.* (2004) and Chanchani *et al.* (2014) indicate signs of the presence of sloth bear *Melursus ursinus*.

## METHODS

From November 2013 to November 2014, we surveyed all the ranges and wetlands of the Sanctuary, covering the diversity of habitats to obtain checklists of birds inhabiting the different habitats. Besides the sightings obtained during the surveys, six transects of one kilometre length each were laid in the various habitat types, where systematic sampling was carried out during the mornings.

## RESULTS AND DISCUSSION

A total of 298 bird species were recorded during the study (Table 1). The Management Plan (2011–2012 to 2020–2021) of the Sanctuary lists 223 bird species, of which 212 species were recorded during our study. We recorded an additional 86 species that are not listed in the Forest Department's checklist. Along with these, the bird checklist for Suheldev Wildlife Sanctuary adds up to 310 species.

Twelve species not recorded by us, but listed in the Forest Department's checklist, were Spot-billed Pelican *Pelecanus philippensis*, Great White Pelican *P. onocrotalus*, Striated Heron *Butorides striata*, White Stork *Ciconia ciconia*, Greater Adjutant *Leptoptilos dubius*, Laggar Falcon *Falco jugger*, Swamp Francolin *Francolinus gularis*, Red Spurfowl *Galloperdix spadicea*, Lesser Florican *Sypheotides indicus*, Brown Crake *Porzana akool*, Indian Skimmer *Rynchops albicollis*, and Grey Treepie *Dendrocitta formosae*. Despite our efforts to look out for them, especially since some of them are in the threatened category of IUCN, besides many of them being large and conspicuous species, we did not sight them.

Of the 298 species recorded during the study, 181 (61%) species are year-round residents that are likely to breed in the sanctuary area or adjoins, judging by their presence throughout the year – no breeding bird surveys were carried out during the study. Winter migrants constitute at least 80 (27%) species, the majority comprise waterfowl, besides other migratory species such as flycatchers, warblers, and

wagtails. Six species are breeding visitors (summer migrants), and 17 (6%) species show local movements. There are five passage migrants which stay in the area for a day or two, or occasionally for a week or so. The Amur Falcon *Falco amurensis* is a fall migrant, i.e., it passes through only during the onset of migration in November (Bhargava *et al.* 2014) and was seen for the first time in Uttar Pradesh. The Yellow-breasted Bunting *Emberiza aureola* is a spring migrant, passing through this area in March on its return migration. The Demoiselle Crane *Grus virgo*, Red-headed Bunting *Emberiza melanocephala*, and Black-headed Bunting *Emberiza bruniceps* are two-way migrants, i.e. passing through the area at the start and the end of winter.

Of the 298 species recorded in the Sanctuary during our study, 29 (nearly 10%) species are listed under the globally threatened categories of IUCN. These include 3 Critically Endangered, 3 Endangered, 7 Vulnerable, and 16 Near Threatened species. Their sightings are discussed below:

### CRITICALLY ENDANGERED

#### Slender-billed Vulture *Gyps tenuirostris*

We recorded the Slender-billed Vulture on seven occasions in four ranges: East Sohelwa, West Sohelwa, Rampur, and Tulsipur. Not less than 20 Slender-billed were sighted during the winter of 2013–14. The Sohelwa population, though small, is significant considering its Critically Endangered status. It probably breeds in the Poorvi Sohelwa Range, thus making Suheldev a very important site for this species.

#### White-rumped Vulture *Gyps bengalensis*

We recorded the White-rumped Vulture from four ranges: East Sohelwa, West Sohelwa, Rampur, and Tulsipur. More than 60 birds were sighted among mixed flocks of Slender-billed and Himalayan Griffon *Gyps himalayensis* from the buffer areas of the Sanctuary. The presence of more than 60% juveniles indicates good breeding success of this species in the Suheldev area. The presence of livestock around the Sanctuary ensures a good food supply for these birds, nevertheless, there is a corresponding threat if the drug diclofenac is used for treatment of sick cattle.

In Uttar Pradesh, the White-rumped now occurs in small numbers in certain pockets. According to Rahmani *et al.* (2014), there are numerous records of White-rumped Vulture from the Suheldev area in recent years: a mixed flock of 50+ birds (along with Himalayan and Eurasian Griffon *Gyps fulvus*) along the Balrampur-Tulsipur road in March 2009; over 30 vultures roosting on a mango tree and a dry silk cotton tree in a grassland near Motipur reservoir in December 2009; regular sighting of 20 to 60 vultures from East and West

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**Table 1:** Birds recorded in Suheldev Wildlife Sanctuary during the study

S. No.	Species	Status	Habitat	Occurrence	Threat Category
1.	Little Grebe <i>Tachybaptus ruficollis</i>	RB	WL	C	LC
2.	Black-necked Grebe <i>Podiceps nigricollis</i>	WV	WL	O	LC
3.	Great Crested Grebe <i>Podiceps cristatus</i>	WV	WL	O	LC
4.	Indian Shag <i>Phalacrocorax fuscicollis</i>	LM	WL	U	LC
5.	Great Cormorant <i>Phalacrocorax carbo</i>	RB/LM	WL	C	LC
6.	Little Cormorant <i>Microcarbo niger</i>	RB	WL	C	LC
7.	Oriental Darter <i>Anhinga melanogaster</i>	RB	WL	O	NT
8.	Little Egret <i>Egretta garzetta</i>	RB	WL	C	LC
9.	Great Egret <i>Egretta alba</i>	RB	WL	C	LC
10.	Intermediate Egret <i>Egretta intermedia</i>	RB	WL	C	LC
11.	Eastern Cattle Egret <i>Bubulcus coromandus</i>	RB	WL/ML/RF/AGR	C	LC
12.	Grey Heron <i>Ardea cinerea</i>	RB/LM	WL/ML	O	LC
13.	Purple Heron <i>Ardea purpurea</i>	RB	WL/ML	O	LC
14.	Indian Pond-heron <i>Ardeola grayii</i>	RB	ML/ RF	C	LC
15.	Black-crowned Night-heron <i>Nycticorax nycticorax</i>	RB	WL/ML	O	LC
16.	Black Bittern <i>Dupetor flavicollis</i>	BV	WL/ML	U	LC
17.	Chestnut Bittern <i>Ixobrychus cinnamomeus</i>	UC	ML	O	LC
18.	Asian Openbill <i>Anastomus oscitans</i>	RB	ML/WL/AGR	C	LC
19.	White Stork <i>Ciconia ciconia</i>	WV	ML/WL	U	LC
20.	Asian Woollyneck <i>Ciconia episcopus</i>	WV	ML/WL	O	VU
21.	Painted Stork <i>Mycteria leucocephala</i>	WV	ML/ RF	O	NT
22.	Black Stork <i>Ciconia nigra</i>	WV	WL	C	LC
23.	Black-necked Stork <i>Ephipporhynchus asiaticus</i>	RB	WL	U	NT
24.	Lesser Adjutant <i>Leptoptilos javanicus</i>	WV	WL/ML/AGR	U	VU
25.	Glossy Ibis <i>Plegadis falcinellus</i>	WV	WL/ML	O	LC
26.	Black-headed Ibis <i>Threskiornis melanocephalus</i>	RB	WL/ML	O	NT
27.	Eurasian Spoonbill <i>Platalea leucorodia</i>	LM	WL/ML	U	LC
28.	Indian Black Ibis <i>Pseudibis papillosa</i>	RB	WL/ML	C	LC
29.	Bar-headed Goose <i>Anser indicus</i>	WV	WL/AGR	C	LC
30.	Greylag Goose <i>Anser anser</i>	WV	WL/AGR	C	LC
31.	Lesser Whistling-duck <i>Dendrocygna javanica</i>	RB/LM	WL/ML/AGR	C	LC
32.	Common Shelduck <i>Tadorna tadorna</i>	WV	WL	C	LC
33.	Ruddy Shelduck <i>Tadorna ferruginea</i>	WV	WL/AGR	U	LC
34.	Knob-billed Duck <i>Sarkidiornis melanotos</i>	RB/LM	WL/ML	C	LC
35.	Common Teal <i>Anas crecca</i>	WV	WL/ML	C	LC
36.	Garganey <i>Querquedula querquedula</i>	WV	WL	C	LC
37.	Falcated Duck <i>Mareca falcata</i>	WV	WL	O	NT
38.	Gadwall <i>Mareca strepera</i>	WV	WL	C	LC
39.	Eurasian Wigeon <i>Mareca penelope</i>	WV	WL	C	LC
40.	Northern Shoveler <i>Spatula clypeata</i>	WV	WL	C	LC
41.	Northern Pintail <i>Anas acuta</i>	WV	WL	C	LC
42.	Indian Spot-billed Duck <i>Anas poecilorhyncha</i>	RB	WL	C	LC
43.	Mallard <i>Anas platyrhynchos</i>	WV	WL	O	LC
44.	Tufted Duck <i>Aythya fuligula</i>	WV	WL	C	LC
45.	Ferruginous Duck <i>Aythya nyroca</i>	WV	WL	U	NT

**Table 1:** Birds recorded in Suheldev Wildlife Sanctuary during the study (*contd.*)

S. No.	Species	Status	Habitat	Occurrence	Threat Category
46.	Common Pochard <i>Aythya ferina</i>	WV	WL	C	VU
47.	Red-crested Pochard <i>Netta rufina</i>	WV	WL	C	LC
48.	Cotton Teal <i>Nettapus coromandelianus</i>	RB/LM	WL/ML	C	LC
49.	Black-winged Kite <i>Elanus caeruleus</i>	RB	WGL/AGR	C	LC
50.	Black Kite <i>Milvus migrans</i>	RB	WGL/AGR	C	LC
51.	Shikra <i>Accipiter badius</i>	RB	MF/WGL	C	LC
52.	Eurasian Sparrowhawk <i>Accipter nisus</i>	WV	MF/WGL	U	LC
53.	Long-legged Buzzard <i>Buteo rufinus</i>	WV	MF/WGL	U	LC
54.	Oriental Honey-buzzard <i>Pernis ptilorhynchus</i>	RB	MF/MC	O	LC
55.	White-eyed Buzzard <i>Butastur teesa</i>	RB	AGR/WGL	C	LC
56.	Crested Serpent-eagle <i>Spilornis cheela</i>	RB	MF/RF/MC	C	LC
57.	Short-toed Eagle <i>Circaetus gallicus</i>	RB	WGL/MF	U	LC
58.	Booted Eagle <i>Hieraaetus pennatus</i>	WV	WGL/MF	U	LC
59.	Changeable Hawk-eagle <i>Nisaetus limnaeetus</i>	RB	MF/WGL	U	LC
60.	Indian Spotted Eagle <i>Clanga hastata</i>	RB	MF/AGF	U	VU
61.	Greater Spotted Eagle <i>Clanga clanga</i>	WV	MF/AGF	U	VU
62.	Steppe Eagle <i>Aquila nipalensis</i>	WV	MF/WGL	U	LC
63.	Tawny Eagle <i>Aquila rapax</i>	RB	MF/WGL	U	LC
64.	Western Osprey <i>Pandion haliaetus</i>	WV	WL	O	LC
65.	Lesser Fish-eagle <i>Ichthyophaga humilis</i>	RB	RF	U	NT
66.	Grey-headed Fish-eagle <i>Ichthyophaga ichthyaetus</i>	RB	RF	U	NT
67.	White-rumped Vulture <i>Gyps bengalensis</i>	RB	AGR/WGL	C	CR
68.	Slender-billed Vulture <i>Gyps tenuirostris</i>	RB	AGR/WGL	O	CR
69.	Griffon Vulture <i>Gyps fulvus</i>	WV	AGR/WGL	C	LC
70.	Himalayan Vulture <i>Gyps himalayensis</i>	LM	AGR/WGL	C	NT
71.	Egyptian Vulture <i>Neophron percnopterus</i>	RB	AGR/WGL	O	EN
72.	Red-headed Vulture <i>Aegypius calvus</i>	RB	AGR/WGL	O	CR
73.	Cinereous Vulture <i>Aegypius monachus</i>	WV	AGR/WGL	O	NT
74.	Pallid Harrier <i>Circus macrourus</i>	WV	AGR/WGL	U	NT
75.	Pied Harrier <i>Circus melanoleucos</i>	WV	AGR/WGL	U	LC
76.	Western Marsh-harrier <i>Circus aeruginosus</i>	WV	ML/WL	O	LC
77.	Common Kestrel <i>Falco tinnunculus</i>	WV	AGR/WGL	C	LC
78.	Amur Falcon <i>Falco amurensis</i>	FM	AGR	U	LC
79.	Red-headed Falcon <i>Falco chicquera</i>	RB	WGL/AGR/	O	NT
80.	Peregrine Falcon <i>Falco peregrinus</i>	WV	WL/WGL	U	LC
81.	Grey Francolin <i>Francolinus pondicerianus</i>	RB	AGR/WGL	C	LC
82.	Black Francolin <i>Francolinus francolinus</i>	RB	AGR/WGL	C	LC
83.	Common Quail <i>Coturnix coturnix</i>	WV/RB?	AGR/WGL	O	LC
84.	Rain Quail <i>Coturnix coromandelica</i>	WV/RB?	AGR/WGL	O	LC
85.	Blue-breasted Quail <i>Excalfactoria chinensis</i>	RB	AGR/WGL	U	LC
86.	Barred Buttonquail <i>Turnix suscitator</i>	RB	AGR/WGL	C	LC
87.	Red Junglefowl <i>Gallus gallus</i>	RB	MF/MC	C	LC
88.	Indian Peafowl <i>Pavo cristatus</i>	RB	MF/MC/AGR	C	LC
89.	Sarus Crane <i>Grus antigone</i>	RB	ML/AGR	U	VU
90.	Demoiselle Crane <i>Grus virgo</i>	TWV	ML/WL	U	LC

**Table 1:** Birds recorded in Suheldev Wildlife Sanctuary during the study (*contd.*)

S. No.	Species	Status	Habitat	Occurrence	Threat Category
91.	Ruddy-breasted Crake <i>Porzana fusca</i>	RB	ML/WL	U	LC
92.	White-breasted Waterhen <i>Amaurornis phoenicurus</i>	RB	ML/ACF	C	LC
93.	Watercock <i>Gallinula cinerea</i>	RB	ML/WL	O	LC
94.	Purple Swampphen <i>Porphyrio [porphyrio] poliocephalus</i>	RB	ML/WL	C	LC
95.	Common Moorhen <i>Gallinula chloropus</i>	RB	ML/WL	C	LC
96.	Eurasian Coot <i>Fulica atra</i>	WV	WL	C	LC
97.	Black-winged Stilt <i>Himantopus himantopus</i>	WV	ML	C	LC
98.	Pheasant-tailed Jacana <i>Hydrophasianus chirurgus</i>	RB	ML/WL	C	LC
99.	Bronze-winged Jacana <i>Metopidius indicus</i>	RB	ML/WL	C	LC
100.	Great Thick-knee <i>Esacus recurvirostris</i>	RB	WL	U	LC
101.	Indian Stone-curlew <i>Burhinus indicus</i>	RB	AGR/WGL	O	LC
102.	Small Pratincole <i>Glareola lactea</i>	RB	ML	U	LC
103.	Indian Courser <i>Cursorius coromandelicus</i>	RB	AGR	U	LC
104.	Red-wattled Lapwing <i>Vanellus indicus</i>	RB	AGR	C	LC
105.	Yellow-wattled Lapwing <i>Vanellus malabaricus</i>	WV	AGR	U	LC
106.	Grey-headed Lapwing <i>Vanellus cinereus</i>	WV	ML	U	LC
107.	White-tailed Lapwing <i>Vanellus leucurus</i>	WV	ML	U	LC
108.	River Lapwing <i>Vanellus duvaucelii</i>	RB	WL/ML	O	NT
109.	Northern Lapwing <i>Vanellus vanellus</i>	WV	ML	U	LC
110.	Little Ringed Plover <i>Charadrius dubius</i>	WV	ML	C	LC
111.	Common Greenshank <i>Tringa nebularia</i>	WV	ML	O	LC
112.	Wood Sandpiper <i>Tringa glareola</i>	WV	ML	O	LC
113.	Green Sandpiper <i>Tringa ochropus</i>	WV	ML	O	LC
114.	Common Sandpiper <i>Actitis hypoleucos</i>	WV	ML	O	LC
115.	Marsh Sandpiper <i>Tringa stagnatilis</i>	WV	ML	C	LC
116.	Common Redshank <i>Tringa totanus</i>	WV	ML	O	LC
117.	Spotted Redshank <i>Tringa erythropus</i>	WV	ML	O	LC
118.	Ruff <i>Philomachus pugnax</i>	WV	ML	C	LC
119.	Temminck's Stint <i>Ereunetes temminckii</i>	WV	ML	O	LC
120.	Little Stint <i>Ereunetes minutus</i>	WV	ML	C	LC
121.	Great Painted-snipe <i>Rostratula benghalensis</i>	RB	ML	O	LC
122.	Common Snipe <i>Gallinago gallinago</i>	WV	ML	U	LC
123.	Brown-headed Gull <i>Chroicocephalus brunnicephalus</i>	WV	WL	C	LC
124.	Common Black-headed Gull <i>Chroicocephalus ridibundus</i>	WV	WL	C	LC
125.	Black-bellied Tern <i>Sterna acuticauda</i>	RB	WL	U	EN
126.	River Tern <i>Sterna aurantia</i>	RB	WL	O	NT
127.	Whiskered Tern <i>Chlidonias hybrida</i>	RB	WL	O	LC
128.	Blue Rock Pigeon <i>Columba livia</i>	RB	AGR	C	LC
129.	Oriental Turtle-dove <i>Streptopelia orientalis</i>	RB	MF	C	LC
130.	Laughing Dove <i>Spilopelia senegalensis</i>	RB	AGR	C	LC
131.	Red Collared-dove <i>Streptopelia tranquebarica</i>	RB	AGR	C	LC
132.	Spotted Dove <i>Spilopelia chinensis</i>	RB	MF/MC/AGR	C	LC
133.	Eurasian Collared-dove <i>Streptopelia decaocto</i>	RB	AGR/MF/WGL	C	LC
134.	Emerald Dove <i>Chalcophaps indica</i>	RB	MF/MC	C	LC
135.	Orange-breasted Green-pigeon <i>Treron bicinctus</i>	RB	MF	O	LC

**Table 1:** Birds recorded in Suheldev Wildlife Sanctuary during the study (*contd.*)

S. No.	Species	Status	Habitat	Occurrence	Threat Category
136.	Yellow-footed Green-pigeon <i>Treron phoenicopterus phoenicopterus</i>	RB	MF	C	LC
137.	Ashy-headed Green-pigeon <i>Treron phayrei</i>	RB	MF	U	NT
138.	Plum-headed Parakeet <i>Psittacula cyanocephala</i>	RB	MF/MC	C	LC
139.	Rose-ringed Parakeet <i>Psittacula krameri</i>	RB	MF/MC/AGR	C	LC
140.	Alexandrine Parakeet <i>Psittacula eupatria</i>	RB	MF/MC	C	NT
141.	Slaty-headed Parakeet <i>Psittacula himalayana</i>	LM	MF	U	LC
142.	Green-billed Malkoha <i>Phaenicophaeus tristis</i>	RB	MF/MC	U	LC
143.	Sirkeer Malkoha <i>Taccocua leschenaultii</i>	RB	MF/MC/AGR	U	LC
144.	Lesser Coucal <i>Centropus bengalensis</i>	RB	GL	O	LC
145.	Greater Coucal <i>Centropus sinensis</i>	RB	WGL/AGR	C	LC
146.	Brown Hawk-owl <i>Ninox scutulata</i>	RB	MF/WGL/MC	U	LC
147.	Common Barn-owl <i>Tyto alba</i>	RB	WGL/MF	U	LC
148.	Indian Scops-owl <i>Otus bakkamoena</i>	RB	MF/MC	U	LC
149.	Spotted Owlet <i>Athene brama</i>	RB	AGF/MF	C	LC
150.	Jungle Owlet <i>Glaucidium radiatum</i>	RB	MF/WGL/MC	C	LC
151.	Indian Eagle-owl <i>Bubo bengalensis</i>	RB	MF/MC	U	LC
152.	Forest Eagle-owl <i>Ketupa nipalensis</i>	RB	MF/MC	U	LC
153.	Brown Fish-owl <i>Ketupa zeylonensis</i>	RB	MF/MC	U	LC
154.	Indian Little Nightjar <i>Caprimulgus asiaticus</i>	RB	MC/MF	O	LC
155.	Crested Tree-swift <i>Hemiprocne coronata</i>	RB	WL/WGL/AGR	U	LC
156.	Asian Palm-swift <i>Cypsiurus balasiensis</i>	RB	MF/WGL	C	LC
157.	Little Swift <i>Apus affinis</i>	RB	MF/WGL	C	LC
158.	Indian Roller <i>Coracias benghalensis benghalensis</i>	RB	MF/GL	C	LC
159.	Common Hoopoe <i>Upupa epops</i>	RB	AGR/WGL/MF	C	LC
160.	Stork-billed Kingfisher <i>Pelargopsis capensis</i>	RB	RF/WL	C	LC
161.	Black-capped Kingfisher <i>Halcyon pileata</i>	WV	RF	U	LC
162.	White-throated Kingfisher <i>Halcyon smyrnensis</i>	RB	RF/WL/WGL	C	LC
163.	Himalayan Pied Kingfisher <i>Ceryle lugubris</i>	LM	WL	U	LC
164.	Lesser Pied Kingfisher <i>Ceryle rudis</i>	RB	WL	C	LC
165.	Common Kingfisher <i>Alcedo atthis</i>	RB	WL	O	LC
166.	Little Green Bee-eater <i>Merops orientalis</i>	RB	WGL/AGF	C	LC
167.	Chestnut-headed Bee-eater <i>Merops leschenaulti</i>	BV	MF/WGL	O	LC
168.	Blue-tailed Bee-eater <i>Merops philippinus</i>	BV	WGL/MF	C	LC
169.	Blue-bearded Bee-eater <i>Nyctyornis athertoni</i>	RB	WGL	U	LC
170.	Indian Grey Hornbill <i>Ocyroceros birostris</i>	RB	MF/MC/WGL	C	LC
171.	Oriental Pied Hornbill <i>Anthracoceros albirostris</i>	RB	MF/MC	O	LC
172.	Coppersmith Barbet <i>Xantholaema haemacephala</i>	RB	MF/MC	C	LC
173.	Brown-headed Barbet <i>Megalaima zeylanica</i>	RB	MF/MC	C	LC
174.	Eurasian Wryneck <i>Jynx torquilla</i>	WV	MF/WGL	U	LC
175.	Indian Pygmy Woodpecker <i>Dendrocopos nanus</i>	RB	MF/WGL/RF	O	LC
176.	Yellow-fronted Pied Woodpecker <i>Dendrocopos maharattensis</i>	RB	MF/MC/RF/WGL	O	LC
177.	Scaly-bellied Woodpecker <i>Picus squamatus</i>	RB	MF/MC	U	LC
178.	Streaked-throated Woodpecker <i>Picus xanthopygaeus</i>	RB	MF/MC	U	LC
179.	Rufous Woodpecker <i>Micropternus brachyurus</i>	RB	MF/MC	U	LC

**Table 1:** Birds recorded in Suheldev Wildlife Sanctuary during the study (*contd.*)

S. No.	Species	Status	Habitat	Occurrence	Threat Category
180.	Himalayan Flameback <i>Dinopium shorii</i>	LM	MF/MC	O	LC
181.	Black-rumped Flameback <i>Dinopium benghalense</i>	RB	MF/MC/RF	C	LC
182.	Greater Flameback <i>Chrysocolaptes guttacristatus</i>	RB	MF/MC	O	LC
183.	Great Slaty Woodpecker <i>Mulleripicus pulverulentus</i>	RB	MC/MF	U	VU
184.	Oriental Skylark <i>Alauda gulgula</i>	RB	AGR	C	LC
185.	Bengal Bushlark <i>Mirafra assamica</i>	RB	AGR/WGL	C	LC
186.	Ashy-crowned Finch-lark <i>Eremopterix grisea</i>	RB	AGR/WGL	O	LC
187.	Grey-throated Sand-martin <i>Riparia chinensis</i>	RB	ML	C	LC
188.	Red-rumped Swallow <i>Cecropis daurica</i>	RB	ML	C	LC
189.	Wire-tailed Swallow <i>Hirundo smithii</i>	RB	ML	C	LC
190.	Barn Swallow <i>Hirundo rustica</i>	WV	ML	C	LC
191.	Western Yellow Wagtail <i>Motacilla flava</i>	WV	ML/AGR/MC	C	LC
192.	Grey Wagtail <i>Motacilla cinerea</i>	WV	ML/AGR	C	LC
193.	Citrine Wagtail <i>Motacilla citreola</i>	WV	ML/AGR/MC	C	LC
194.	White Wagtail <i>Motacilla alba dukhunensis</i>	WV	ML/AGR	C	LC
195.	White-browed Wagtail <i>Motacilla maderaspatensis</i>	RB	ML/AGR	C	LC
196.	Olive-backed Pipit <i>Anthus hodgsoni</i>	WV	GL	C	LC
197.	Richard's Pipit <i>Anthus richardi</i>	WV	GL	O	LC
198.	Paddyfield Pipit <i>Anthus rufulus</i>	RB	GL	C	LC
199.	Common Woodshrike <i>Tephrodornis pondicerianus</i>	RB	MF/WGL	O	LC
200.	Black-winged Flycatcher-shrike <i>Hemipus picatus</i>	RB	MF/RF/WGL	U	LC
201.	Black-winged Cuckooshrike <i>Lalage melaschistos</i>	WV	WGL/MF	U	LC
202.	Large Cuckooshrike <i>Coracina macei</i>	RB/LM	MF/MC/WGR/WGL	C	LC
203.	Long-tailed Minivet <i>Pericrocotus ethologus</i>	WV	MC/MF/RF	C	LC
204.	Scarlet Minivet <i>Pericrocotus speciosus</i>	WV	MC/MF	O	LC
205.	Small Minivet <i>Pericrocotus cinnamomeus</i>	WV	MC/MF	C	LC
206.	Red-vented Bulbul <i>Pycnonotus cafer</i>	RB	MF/MC/WGL/RF	C	LC
207.	Red-whiskered Bulbul <i>Pycnonotus jocosus</i>	RB	MF/MC/RF	C	LC
208.	Himalayan Bulbul <i>Pycnonotus leucogenys</i>	RB	MF	C	LC
209.	Black Bulbul <i>Hypsipetes leucocephalus</i>	LM	MF	O	LC
210.	Black-crested Bulbul <i>Pycnonotus flaviventris</i>	RB	MF	C	LC
211.	Common Iora <i>Aegithina tiphia</i>	RB	MF/MC	C	LC
212.	Gold-fronted Leafbird <i>Chloropsis aurifrons</i>	RB	MC/MF	O	LC
213.	'Black-headed' Long-tailed Shrike <i>Lanius schach</i> (tricolor group)	WV	WGL/AGR	C	LC
214.	'Rufous-backed' Long-tailed Shrike <i>Lanius schach</i> (erythronotus group)	WV	WGL/AGR	C	LC
215.	Great Grey Shrike <i>Lanis excubitor lahtora</i>	RB	WGL/WL/AGR	C	LC
216.	Grey-backed Shrike <i>Lanius tephronotus</i>	WV	WGL/AGR	O	LC
217.	Brown Shrike <i>Lanius cristatus cristatus</i>	WV	WGL/AGR	C	LC
218.	Isabelline Shrike <i>Lanius isabellinus</i>	WV	WGL	U	LC
219.	Bay-backed Shrike <i>Lanius vittatus</i>	RB	WGL/AGR	O	LC
220.	Orange-headed Thrush <i>Geokichla citrina</i>	WV	MF/RF/MC	C	LC
221.	Blue Whistling-thrush <i>Myophonus caeruleus</i>	LM	MF	U	LC
222.	Black-throated Thrush <i>Turdus atrogularis</i>	WV	MF/AGR	O	LC
223.	Small-billed Scaly Thrush <i>Zoothera dauma</i>	WV	MF/AGR	U	LC

**Table 1:** Birds recorded in Suheldev Wildlife Sanctuary during the study (*contd.*)

S. No.	Species	Status	Habitat	Occurrence	Threat Category
224.	Bluethroat <i>Luscinia svecica svecica</i>	WV	WL/AGR	O	LC
225.	White-rumped Shama <i>Copsychus malabaricus</i>	RB	MF/MC/RF	C	LC
226.	Oriental Magpie-robin <i>Copsychus saularis</i>	RB	MF/RF	C	LC
227.	Indian Black Robin <i>Copsychus fulicatus</i>	RB	WGL/AGR	C	LC
228.	Brown Rock-chat <i>Oenanthe fusca</i>	RB	AGR	C	LC
229.	Black Redstart <i>Phoenicurus ochruros rufiventris</i>	WV	WGL/AGR/MF	C	LC
230.	White-capped River-chat <i>Phoenicurus leucocephalus</i>	LM	Stream	U	LC
231.	Pied Bushchat <i>Saxicola caprata</i>	RB	WGL/AGR	C	LC
232.	Grey Bushchat <i>Rhodophila ferrea</i>	WV	WGL	U	LC
233.	Siberian Stonechat <i>Saxicola maurus</i>	WV	WGL/AGR	C	LC
234.	White-browed Fantail <i>Rhipidura aureola</i>	RB	MF/MC	C	LC
235.	White-throated Fantail <i>Rhipidura albicollis</i>	WV	MF/MC	C	LC
236.	Blue-naped Blue Monarch <i>Hypothymis azurea</i>	RB	MF/MC	O	LC
237.	Asian Paradise Flycatcher <i>Terpsiphone paradisi</i>	BW	MF/RF/MC	O	LC
238.	Red-breasted Flycatcher <i>Ficedula parva</i>	WV	MF/WGL/RF	C	LC
239.	Ultramarine Flycatcher <i>Ficedula superciliaris</i>	WV	MF	U	LC
240.	Tickell's Blue Flycatcher <i>Cyornis tickelliae</i>	WV	MF/RF	O	LC
241.	Verditer Flycatcher <i>Eumyias thalassinus</i>	WV	MF/MC	O	LC
242.	Yellow-eyed Babbler <i>Chrysomma sinense</i>	RB	WGL	O	LC
243.	Tawny-bellied Babbler <i>Dumetia hyperythra</i>	RB	WGL/MF	U	LC
244.	Common Babbler <i>Turdoides caudata</i>	RB	WGL/AGR	C	LC
245.	Striated Babbler <i>Turdoides earlei</i>	RB	GL	C	LC
246.	Large Grey Babbler <i>Turdoides malcolmi</i>	RB	AGR/MF	C	LC
247.	Jungle Babbler <i>Turdoides striata</i>	RB	MF/MC/AGR	C	LC
248.	Puff-throated Babbler <i>Pellorneum ruficeps</i>	RB	MF/MC	O	LC
249.	Striated Grassbird <i>Megalurus palustris</i>	RB	GL	C	LC
250.	Zitting Cisticola <i>Cisticola juncidis</i>	RB	GL	C	LC
251.	Ashy Prinia <i>Prinia socialis</i>	RB	GL/WGL/AGR	C	LC
252.	Plain Prinia <i>Prinia inornata</i>	RB	GL/WGL/AGR	C	LC
253.	Grey-breasted Prinia <i>Prinia hodgsoni</i>	RB	GL/WGL/AGR	U	LC
254.	Indian Reed-warbler <i>Acrocephalus [stentoreus] brunnescens</i>	WV	GL	U	LC
255.	Blyth's Reed-warbler <i>Acrocephalus dumetorum</i>	WV	GL	U	LC
256.	Common Tailorbird <i>Orthotomus sutorius</i>	RB	MF/WGL	C	LC
257.	Grey-headed Canary-flycatcher <i>Culicicapa ceylonensis</i>	WV	MC/MF	C	LC
258.	Smoky Leaf-warbler <i>Phylloscopus fuligiventer</i>	WV	WL/ MF	U	LC
259.	Greenish Warbler <i>Phylloscopus trochiloides</i>	WV	MF	O	LC
260.	Lesser Whitethroat <i>Sylvia curruca halimodendri</i>	WV	WGL/MF	C	LC
261.	Cinereous Tit <i>Parus cinereus</i>	RB	MF/MC/WGL	C	LC
262.	Indian Nuthatch <i>Sitta castanea</i>	RB	MF/MC/WGL	C	LC
263.	Thick-billed Flowerpecker <i>Dicaeum agile</i>	RB	MF/MC	O	LC
264.	Oriental White-eye <i>Zosterops palpebrosus</i>	RB	MF/MC	C	LC
265.	Purple Sunbird <i>Cinnyris asiaticus</i>	RB	MF/MC/WGL	C	LC
266.	Crimson Sunbird <i>Aethopyga siparaja</i>	RB	MF/MC	O	LC



**Table 1:** Birds recorded in Suheldev Wildlife Sanctuary during the study (*contd.*)

S. No.	Species	Status	Habitat	Occurrence	Threat Category
267.	Crested Bunting <i>Emberiza lathami</i>	RB	WGL/AGR	C	LC
268.	Yellow-breasted Bunting <i>Emberiza aureola</i>	SM/WV?	AGR/GL	U	EN
269.	Black-headed Bunting <i>Emberiza melanocephala</i>	TWM	AGR	C	LC
270.	Red-headed Bunting <i>Emberiza bruniceps</i>	TWM	AGR	C	LC
271.	Common Rosefinch <i>Erythrura erythrura</i>	WV	AGR/MF	O	LC
272.	Red Avadavat <i>Amandava amandava</i>	RB	GL/WGL/AGR	C	LC
273.	Chestnut Munia <i>Lonchura atricapilla</i>	1 record	GL/AGR	U	LC
274.	Tricoloured Munia <i>Lonchura malacca</i>	BV	GL/AGR	C	LC
275.	Indian Silverbill <i>Euodice malabarica</i>	RB	GL/WGL/AGR	U	LC
276.	Scaly-breasted Munia <i>Lonchura punctulata</i>	RB	GL/WGL/AGR	C	LC
277.	House Sparrow <i>Passer domesticus</i>	RB	GL/WGL/AGR	C	LC
278.	Yellow-throated Sparrow <i>Gymnoris xanthocollis</i>	RB	GL/WGL/AGR	C	LC
279.	'Indian' Baya Weaver <i>Ploceus philippinus philippinus</i>	RB	GL/WGL/AGR	C	LC
280.	Streaked Weaver <i>Ploceus manyar</i>	RB	GL/WGL/AGR	U	LC
281.	Black-breasted Weaver <i>Ploceus benghalensis</i>	RB	GL/WGL/AGR	C	LC
282.	Indian Golden Oriole <i>Oriolus kundoo</i>	BV	MF/WGL/RF	O	LC
283.	Black-hooded Oriole <i>Oriolus xanthornus</i>	RB	MF/MC/WGL	C	LC
284.	Black Drongo <i>Dicrurus macrocercus</i>	RB	MC/WGL	C	LC
285.	Ashy Drongo <i>Edolius leucophaeus</i>	WV	MC/MF	U	LC
286.	White-bellied Drongo <i>Edolius caerulescens</i>	RB	MC/MF/RF/WGL	C	LC
287.	Greater Racket-tailed Drongo <i>Dicrurus paradiseus</i>	RB	MC/MF/RF	C	LC
288.	Hair-crested Drongo <i>Dicrurus hottentottus</i>	RB	MC/MF	C	LC
289.	Grey-headed Starling <i>Sturnia malabarica</i>	RB	MF/WGL	C	LC
290.	Brahminy Starling <i>Sturnia pagodarum</i>	RB	MF/WGL/AGR	C	LC
291.	Asian Pied Starling <i>Gracupica contra</i>	RB	WGL/MF	C	LC
292.	Bank Myna <i>Acridotheres ginginianus</i>	RB	AGR/GL	C	LC
293.	Common Myna <i>Acridotheres tristis</i>	RB	AGR/WGL	C	LC
294.	Jungle Myna <i>Acridotheres fuscus</i>	RB	MF	C	LC
295.	House Crow <i>Corvus splendens</i>	RB	AGR/WGL/MF	C	LC
296.	Jungle Crow <i>Corvus [macrorhynchos] culminatus</i>	RB	AGR/MF/MC	C	LC
297.	Red-billed Blue Magpie <i>Urocissa erythrorhyncha</i>	LM	MF	U	LC
298.	Rufous Treepie <i>Dendrocitta vagabunda</i>	RB	MF/MC/WGL	C	LC

## Abbreviations:

RB - year-round resident, WV - winter visitor, BV - breeding visitor, LM - local migrant, SM - spring migrant, FM - fall migrant, TWM - two-way migrant; MF - mixed forest, WL - wetland, MC - sal or teak forest, ML - marshland, RF - riparian forest, GL - grassland, AGR - agricultural crop fields on forest edges, WGL - wooded grassland;

C - Common (C = seen frequently, more than 10 sightings), O - Occasional (O = less than 10 sightings), Uncommon (U = less than 5 sightings, and irregularly seen); CR - Critically Endangered, EN - Endangered, VU - Vulnerable; NT - Near Threatened, LC - Least Concern.

\*Note: Status grouping was done based on our year-long observations, along with previous published sources and information gathered from researchers. Wetland and marshland species are mostly clumped together as ML/WL because of the difficulty in delineating the habitat boundaries for certain species. Special emphasis was given to globally threatened species such as vultures, storks, and cranes. The level of threat for each species is based on the list prepared by BirdLife International for IUCN.

Sohelwa ranges, mostly around Hathiakunda and Bhainsahi stream, between August 2010 and February 2011; over 70 birds sighted on a tree from Navashahr beat in Tulsipur range in January 2012; and a mixed flock of more than 100 vultures near Bankatwa during early 2013.

#### **Red-headed Vulture *Aegypius calvus***

Only one confirmed sighting of this species was obtained from Hathiakunda nullah on April 01, 2015 (Anand Singh *in litt.* 2015).

#### **ENDANGERED**

#### **Egyptian Vulture *Neophron percnopterus***

During the survey, 27 Egyptian Vultures were sighted, solitary or in twos or threes, sometimes in the company of other vultures, in almost all the ranges, particularly in East Sohelwa, West Sohelwa, Tulsipur, and Rampur.

#### **Black-bellied Tern *Sterna acuticauda***

Around 25–30 Black-bellied Terns were recorded in East Sohelwa range at Rampur Bandh during the second week of April 2014. Other than this, one or two individuals were recorded in the Bhambhar and Rampur ranges during the same period.

#### **Yellow-breasted Bunting *Emberiza aureola***

The Yellow-breasted Bunting is listed as Vulnerable because its population has undergone a rapid decline mainly due to trapping in the wintering grounds (BirdLife International 2014). Nearly 200 Yellow-breasted Buntings were sighted during the last week of March 2014 in the Rampur Range, near the Chittaurgarh Dam before Suga-nagar Dumri. These buntings were mostly seen foraging in fallow fields in the morning and evening with munias and weaverbirds. During the day, they were observed resting in *Arundo* and *Ipomea* vegetation at the edges of the Chittaurgarh Dam. These birds were perhaps on their way to the wintering grounds as they were not recorded during any other season. In Uttar Pradesh, Yellow-breasted Bunting has earlier been reported only from Dudhwa (Rahmani *et al.* 2014).

#### **VULNERABLE**

#### **Asian Woollyneck *Ciconia episcopus***

The species was seen in most of the ranges in low numbers. A maximum of seven birds was recorded during April 2014 near Rampur Bandh in East Soheldev, while solitary birds or twos or threes were recorded around the

Kohargaddi, Baghelkhand, and Chittaurgarh reservoirs on more than one occasion.

#### **Common Pochard *Aythya ferina***

The Common Pochard has been uplisted as Vulnerable in 2016 (BirdLife International 2016). In Soheldev, the Chittaurgarh Reservoir in Rampur Forest Range is a haven for waterfowl, including Common Pochard. This species was also seen in good numbers (*c.* 80–100) in winter in Suga-nagar Dumri, a wetland formed from the spillage of the Chittaurgarh Dam.

#### **Lesser Adjutant *Leptoptilos javanicus***

In the first week of April 2014, only one individual was recorded in the buffer zone near Semra, the headquarters of Bhambhar Range. It is regularly seen in the terai region, and breeding has been recorded from Dudhwa National Park (Javed and Rahmani 1988). It is quite common in and around Sohagi Barwa Wildlife Sanctuary (Rahmani *et al.* 2015).

#### **Indian Spotted Eagle *Clanga hastata***

A bird was recorded near Baghelkhand reservoir in Tulsipur Range on February 10, 2014. However, this record needs verification due to the lack of good photo-evidence, and remains unconfirmed.

#### **Greater Spotted Eagle *Clanga clanga***

Only one (unconfirmed) record of this species was obtained in January 2014 from Baghelkhand reservoir.

#### **Sarus Crane *Grus antigone***

Uttar Pradesh currently harbours nearly 50% of India's Sarus Crane population. Despite our best effort to locate the species in and around Soheldev Wildlife Sanctuary, only five Sarus Cranes were recorded during our surveys. The records comprise a pair with a juvenile in Rampur Banda and another pair at the outskirts of East Sohelwa in April 2014. We estimate a population of not more than 10 birds in the area. There are good populations of Sarus Crane on the way to Sohagi Barwa Wildlife Sanctuary (from Soheldev), especially in and around Siddharthnagar (Bhargava and Singh 2014).

#### **Great Slaty Woodpecker *Mulleripicus pulverulentus***

The large patches of old sal forest in the core areas of Soheldev offer excellent habitat for the Great Slaty Woodpecker. During our line transect sampling in Mansurwa beat of Rampur range, we encountered this resident species twice in the buffer zone. During January 2014, we sighted 3–5 birds, and again recorded 9–10 birds including four juveniles with the adults from the same area in October. In East Sohelwa,

a group of five birds was recorded in July 2014, 3 km from the Forest Rest House on the SSB Road, Bhaisahinaka. We also heard its call near Sonpatri Ashram in October 2014.

In Uttar Pradesh, the Great Slaty Woodpecker is mainly found in the mature sal forests of Dudhwa National Park, Katerniaghat Wildlife Sanctuary, Kishanpur Wildlife Sanctuary, and Pilibhit Reserve Forest (Rahmani 2012; Rahmani *et al.* 2014).

#### NEAR THREATENED

##### **Oriental Darter *Anhinga melanogaster***

The Oriental Darter was recorded in most wetlands of the Sanctuary. In certain seasons, up to 20 birds were counted roosting around the Chittaurgarh Dam before Suga-nagar Dumri in Rampur and also at Rampur reservoir in East Sohelwa range during our monthly waterfowl census. We recorded a total of 40 birds along with other cormorants during our visits. There is also a good population of this species (>30) in the wetlands of the neighbouring Bhinga Range (not part of Suheldev Wildlife Sanctuary).

##### **Painted Stork *Mycteria leucocephala***

More than a dozen Painted Storks were recorded from east Sohelwa Range in Rampur Bandha in April 2014. A few solitary or 2–3 birds were also recorded at various dams.

##### **Black-necked Stork *Ephippiorhynchus asiaticus***

A pair each was recorded from the water bodies of Rampur Bandha and Razia Taal of East Sohelwa Range in April 2014.

##### **Black-headed Ibis *Threskiornis melanocephalus***

This species was frequently recorded around Baghelkhand reservoir, Rampur and Chittaurgarh dams. Eight to ten birds were encountered during the visits.

##### **Ferruginous Duck *Aythya nyroca***

We recorded less than 10 Ferruginous Ducks, along with pochards, at Chittaurgarh dam near Suga-nagar Dumri during the winter waterbird surveys in December 2013.

##### **Falcated Duck *Mareca falcata***

This species was recorded in Bhagwanpur Bandh, in Tulsipur Range during January 2017 (Sharad Gaur, *in litt.* 2017).

##### **Lesser Fish-Eagle *Ichthyophaga humilis***

One or two Lesser Fish-Eagles were regularly recorded at Razia Taal in East Sohelwa range. It probably breeds in the

Sanctuary. In Uttar Pradesh, the Lesser Fish-Eagle is reported from Dudhwa, and is likely to occur in Katerniaghat and Kishanpur, and probably also North Pilibhit Reserve Forests (Rahmani *et al.* 2014).

##### **Grey-headed Fish-Eagle *Ichthyophaga ichthyaetus***

The Grey-headed Fish-Eagle was recorded at Razia Taal, East Sohelwa in the first week of April 2014. Due to identification difficulties between this species and the Lesser Fish-eagle *I. humilis*, there is a possibility of either of the species being misidentified.

##### **Himalayan Griffon *Gyps himalayensis***

This species was encountered throughout the surveys during winter, seen feeding with other vulture species. We recorded between 80 to 100 individuals from almost all ranges of the Sanctuary. Around 40 to 50 birds were seen in the Bhambhar, Rampur, West and East Sohelwa ranges.

##### **Cinereous Vulture *Aegypius monachus***

We recorded three individuals on three occasions in the East and West Sohelwa ranges during February 2014, along with other vulture species.

##### **Pallid Harrier *Circus macrourus***

The Pallid Harrier was recorded twice in January 2014, in and around agricultural fields between the East and West Sohelwa ranges.

##### **Red-headed Falcon *Falco chicquera***

The Red-headed Falcon was occasionally recorded in most of the ranges of Suheldev Wildlife Sanctuary, mainly near open areas adjacent to wetlands.

##### **River Lapwing *Vanellus duvaucelii***

The River Lapwing was regularly recorded, especially around wetlands of East Sohelwa range. During most of our monthly waterbird surveys, we recorded 5 or 6 birds around the Rampur wetlands. The species was also recorded at the Kohargaddi, Vanghoghwa, Girgitahi, and Baghelkhand reservoirs.

##### **River Tern *Sterna aurantia***

The River Tern was seen in and around the various reservoirs and wetlands, flying singly or in group of 3–4 birds

##### **Ashy-headed Green-pigeon *Treron phayrei***

The species was recorded from five ranges on several occasions, and was especially sighted in early summer when the birds engage in courtship display. The majority of

the sightings were in mixed forest patches in the Jarwa and Mansurwa forest beats of Rampur Range, and also in most forest patches of West Sohelwa, East Sohelwa, Bankatwa, and Barhawa ranges.

#### Alexandrine Parakeet *Psittacula eupatria*

The Alexandrine Parakeet was recorded in all the ranges of the Sanctuary, nesting especially in mixed forest of old trees.

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#### REFERENCES

- BHARGAVA, R. & P.N. SINGH (2014): Majhauri Sagar: a potential IBA. *Mistnet* 15(1): 4–6.
- BHARGAVA, R., N. SHINDE, A.R. RAHMANI & R. DE (2014): Recent sighting of Amur Falcons *Falco amurensis* near Suheldev Wildlife Sanctuary, Uttar Pradesh. *Indian BIRDS* 9(5 & 6): 154–155.
- BIRDLIFE INTERNATIONAL (2014): Species factsheet: *Emberiza aureola*. Downloaded from <http://www.birdlife.org> on May 10, 2014.
- BIRDLIFE INTERNATIONAL (2016): The IUCN Red List of Threatened Species. Version 2016-3. <[www.iucnredlist.org](http://www.iucnredlist.org)>.
- CHANCHANI, P., A. BISTA, R. WARRIER, S. NAIR, R. SHARMA, D. HASSAN & M. GUPTA (2014): Status and Conservation of Tigers and their Prey in the Uttar Pradesh Terai. WWF-India, New Delhi.
- ISLAM, M.Z. & A.R. RAHMANI (2004): Important Bird Areas in India: Priority Sites for Conservation. Indian Bird Conservation Network, Bombay Natural History Society and BirdLife International. Oxford University Press, Mumbai. Pp. xviii + 1133.
- JHALA, Y.V., R. GOPAL & Q. QURESHI (2008): Status of Tigers, co-predators and prey in India. National Tiger Conservation Authority, Government of India, New Delhi, and Wildlife Institute of India, Dehradun.
- JOHNSINGH A.J.T., K. RAMESH, Q. QURESHI, A. DAVID, S.P. GOYAL, G.S. RAWAT, K. RAJAPANDIAN & S. PRASAD (2004): Conservation status of tiger and associated species in the Terai Arc Landscape, India. RR-04/001, Wildlife Institute of India, Dehradun. Pp. viii + 110.
- RAHMANI, A.R. (2012): Threatened Birds of India – Their Conservation Requirements. IBCN, BNHS, RSPB and BirdLife International. Oxford University Press, New Delhi. Pp. xvi+864.
- RAHMANI, A.R. & M.Z. ISLAM (2000): Prioritization of the Indian Grasslands for Conservation of Biodiversity. Pp 169–175. In: Singh, S., A.R.K. Sastry, R. Mehta and V. Uppal (Eds): Setting Biodiversity Priorities for India. WWF-India, New Delhi.
- RAHMANI, A.R., M.Z. ISLAM, V.P. SINGH & S. CHAUDHURI (2011): Important Bird Areas of Uttar Pradesh: Priority Sites for Conservation. Indian Bird Conservation Network, Bombay Natural History Society and Katerniaghat Foundation. Pp. 122.
- RAHMANI, A.R., S. KUMAR, N. SRIVASTAV, R. BHARGAVA & N.I. KHAN (2014): Threatened Birds of Uttar Pradesh. IBCN, BNHS, RSPB and BirdLife International. Oxford University Press, New Delhi. Pp. xiv + 226.
- RAHMANI, A.R., R. BHARGAVA & R. DE (2015): Avifaunal Studies at Suheldev Wildlife Sanctuary: Final Report. Bombay Natural History Society, Mumbai. Pp. 110.
- RODGERS, W.A. & H.S. PANWAR (1988): Planning a protected area network in India. Vol. 1 – The Report. Wildlife Institute of India, Dehradun.

