

## **BIRDS OF RATLAM, MADHYA PRADESH, INDIA**

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### **ABSTRACT**

Birds (class Aves) are feathered, winged, bipedal, endothermic, egg-laying, vertebrate animals. With around 10,000 living species, they are the most speciose class of tetrapod vertebrates. All present species belong to the subclass Neornithes, and inhabit ecosystems across the globe, from the Arctic to the Antarctic. Many species undertake long distance annual migrations, and many more perform shorter irregular movements. Birds are social; they communicate using visual signals and through calls and songs, and participate in social behaviours, including cooperative breeding and hunting, flocking, and mobbing of predators. The vast majority of bird species are socially monogamous, usually for one breeding season at a time, sometimes for years, but rarely for life. About 120–130 species have become extinct as a result of human activity since the 17th century, and hundreds more before then. Currently about 1,200 species of birds are threatened with extinction by human activities. The central Indian highlands in the state of Madhya Pradesh comprise the Satpura and Vindhya Ranges which are separated by River Narmada. They are ornithologically little explored, with just a handful of papers published on local avifauna. The present work is carried out in western part of Madhya Pradesh, mostly Ratlam and 94 species of birds were recorded. This is the first report in this area.

### **INTRODUCTION**

Ratlam (23°19'0"N 75°04'0"E) is a city in the northwestern part of the Malwa region in Madhya Pradesh state of central India. The city of Ratlam lies 1,575 feet (480 meters) above sea level. The city has an area of 15.13 square miles (39.19 km<sup>2</sup>). Ratlam, like most of Madhya Pradesh, has humid subtropical climate (Cfa) zone. Three distinct seasons are observed: summer, monsoon and winter. Summers start in mid-March and can be extremely hot from April through June. Highs can reach 112 °F (44 °C), although the humidity is extremely low. The monsoon season starts in late June, with temperatures averaging around 100 °F (38 °C), with sustained, torrential rainfall and high humidity. The average rain fall is 37 inches (937 mm). Winters start in mid-November and are dry, cool and sunny. Temperatures average about 39–46 °F (4–8 °C), but can fall close to freezing on some nights. Ratlam gets moderate rainfall of 35 to 38 inches (890 to 970 mm) from July through September, due to the southwest monsoon.

Little previous work has been carried out on the avifauna of the Ratlam. However some reports from other parts of Madhya Pradesh are reviewed (Pasha and Sankar 1996; Pasha 1998).

### **Study Area**

The area under the present study was mainly Grassland, Open scrub jungle, or Wetland. The terrain is gently undulating and is dissected by a number of seasonal streams and nullahs.

### **MATERIALS AND METHODS**

The present list is the outcome of bird observations mostly carried out between July to September 2013. The birds were identified following Ali 1941. The area was regularly surveyed for birds in all the major habitats. Birds seen were identified and recorded along with habitat type and status (resident or winter visitor). On the basis of the frequency of sighting, the bird species were assigned categories of abundance (rare, uncommon, occasional and common).

### **RESULTS AND DISCUSSION**

94 species of birds were recorded in Ratlam (Table 1).

The Amrit Sagar pond one of the major observation site spread over one km<sup>2</sup> is a major attraction to the migratory water birds. Swamp scattered around the pond is good nesting site for many water birds.

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**Table 1: Species Recorded**

	Species	Habitat	Frequency	Status
1	Little Grebe <i>Tachybaptus ruficollis</i> (Pallas, 1764)	Wl	C	R
2	Little Cormorant <i>Phalacrocorax niger</i> (Vieillot, 1817)	Wl	C	R
3	Little Egret <i>Egretta garzetta</i> (Linnaeus, 1766)	Wl	C	R
4	Cattle Egret <i>Bubulcus ibis</i> (Linnaeus, 1758)	Gr,Os,Cs,Wl	C	R
5	Indian Pond-Heron <i>Ardeola grayii</i> (Sykes, 1832)	Wl	C	R
6	Black Ibis <i>Pseudibis papillosa</i> (Temminck, 1824)	Wl	U	R
7	Spot-billed Duck <i>A. poecilorhyncha</i> (Forester, 1781)	Wl	U	R
8	Northern Pintail <i>A. acuta</i> (Linnaeus, 1758)	Wl	C	W
9	Common Teal <i>A. crecca</i> (Linnaeus, 1758)	Wl	O	W
10	Black Kite <i>Milvus migrans</i> (Boddaert, 1783)	Cs	X	R
11	Brahminy Kite <i>Haliastur indus</i> (Boddaert, 1783)	Wl	U	R
12	Shikra <i>Accipiter badius</i> (Gmelin, 1788)	Cs	C	R
13	Jungle Bush-Quail <i>Perdica asiatica</i> (Latham, 1790)	Gr	C	R
14	Indian Peafowl <i>Pavo cristatus</i> (Linnaeus, 1758)	Gr,Os,Cs	C	R
15	White-breasted Water hen <i>Amaurornis phoenicurus</i> (Pennant, 1769)	Wl	C	R
16	Purple Moorhen <i>Porphyrio porphyrio</i> (Linnaeus, 1758)	Wl	O	W
17	Common Moorhen <i>Gallinula chloropus</i> (Linnaeus, 1758)	Wl	C	R
18	Common Coot <i>Fulica atra</i> (Linnaeus, 1758)	Wl	C	R
19	Bronze-winged Jacana <i>Metopidius indicus</i> (Latham, 1790)	Wl	O	R
20	Red-wattled Lapwing <i>V. indicus</i> (Boddaert, 1783)	Cs,Wl	C	R
21	Common Snipe <i>Gallinago gallinago</i> (Linnaeus, 1758)	Wl	O	W
22	Green Sandpiper <i>Tringa ochropus</i> (Linnaeus, 1758)	Wl	C	W
23	Common Sandpiper <i>Actitis hypoleucos</i> (Linnaeus, 1758)	Wl	O	W
24	Black-winged Stilt <i>Himantopus himantopus</i> (Linnaeus, 1758)	Wl	C	R
25	Indian Courser <i>Cursorius coromandelicus</i> (Gmelin, 1789)	Cs	U	R
26	Painted Sandgrouse <i>Pterocles indicus</i> (Gmelin, 1789)	Os	O	R
27	Blue Rock Pigeon <i>Columba livia</i> (Gmelin, 1789)	Cs	C	R
28	Spotted Dove <i>S. chinensis</i> (Scopoli, 1786)	Cs	C	R
29	Yellow-legged Green-Pigeon <i>Treron phoenicoptera</i> (Latham, 1790)	Cs	C	R
30	Alexandrine Parakeet <i>Psittacula eupatria</i> (Linnaeus, 1766)	Cs	C	R
31	Rose-ringed Parakeet <i>P. krameri</i> (Scopoli, 1769)	Cs	C	R
32	Plum-headed Parakeet <i>P. cyanocephala</i> (Linnaeus, 1766)	Cs	C	R
33	Pied Crested Cuckoo <i>Clamator jacobinus</i> (Boddaert, 1783)	Cs	C	R
34	Indian Cuckoo <i>Cuculus micropterus</i> (Gould, 1838)	Cs	C	R
35	Asian Koel <i>Eudynamis scolopacea</i> (Linnaeus, 1758)	Cs	C	R
36	Greater Coucal <i>Centropus sinensis</i> (Stephens, 1815)	Cs	C	R
37	Barn Owl <i>Tyto alba</i> (Scopoli, 1769)	Cs	U	R
38	Oriental Scops-Owl <i>Otus sunia</i> (Hodgson, 1836)	Cs	U	R

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39	Spotted Owlet <i>Athene brama</i> (Temminck, 1821)	Cs	U	R
40	Short-eared Owl <i>Asio flammeus</i> (Pontoppidan, 1763)	Cs	X	R
41	House Swift <i>Apus affinis</i> (Gray, 1830)	Cs,Wl	C	R
42	Small Blue Kingfisher <i>Alcedo atthis</i> (Linnaeus, 1758)	Wl	O	R
43	White-breasted Kingfisher <i>H. smyrnensis</i> (Linnaeus, 1758)	Cs,Wl	C	R
44	Lesser Pied Kingfisher <i>Ceryle rudis</i> (Linnaeus, 1758)	Wl	C	R
45	Small Bee-eater <i>Merops orientalis</i> (Latham, 1801)	Cs	C	R
46	Indian Roller <i>Coracias benghalensis</i> (Linnaeus, 1758)	Cs	C	R
47	Common Hoopoe <i>Upupa epops</i> (Linnaeus, 1758)	Cs	C	R
48	Indian Grey Hornbill <i>Ocyrceros birostris</i> (Scopoli, 1786)	Cs	C	R
49	Common Swallow <i>Hirundo rustica</i> (Linnaeus, 1758)	Cs,Gr,Wl	C	W
50	Wire-tailed Swallow <i>H. smithii</i> (Leach, 1818)	Wl	C	R
51	White Wagtail <i>Motacilla alba</i> (Linnaeus, 1758)	Wl	O	W
52	Red-vented Bulbul <i>P. cafer</i> (Linnaeus, 1766)	Cs,Os	C	R
53	Indian Robin <i>Saxicoloides fulicata</i> (Linnaeus, 1766)	Cs	C	R
54	Common Babbler <i>Turdoides caudatus</i> (Dumont, 1823)	Cs	C	R
55	Common Tailorbird <i>Orthotomus sutorius</i> (Pennant, 1769)	Cs	C	R
56	Purple Sunbird <i>Nectarinia asiatica</i> (Latham, 1790)	Cs	C	R
57	Common Rosefinch <i>Carpodacus erythrinus</i> (Pallas, 1770)	Cs	O	W
58	Red Munia <i>Amandava amandava</i> (Linnaeus, 1758)	Gr,Os	C	R
59	White-throated Munia <i>Lonchura malabarica</i> (Linnaeus, 1758)	Os,Cs	C	R
60	House Sparrow <i>Passer domesticus</i> (Linnaeus, 1758)	Gr,Cs,Os	C	R
61	Common Myna <i>Acridotheres tristis</i> (Linnaeus, 1766)	Os,Cs	C	R
62	Jungle Myna <i>A. fuscus</i> (Wagler, 1827)	Os	C	R
63	Eurasian Golden Oriole <i>Oriolus oriolus</i> (Linnaeus, 1758)	Cs	O	R
64	Black Drongo <i>Dicrurus macrocercus</i> (Vieillot, 1817)	Gr,Os,Cs	C	R
65	Indian Treepie <i>Dendrocitta vagabunda</i> (Latham, 1790)	Cs	C	R
66	House Crow <i>Corvus splendens</i> (Vieillot, 1817)	Cs	C	R
67	Jungle Crow <i>C. macrorhynchos</i> (Wagler, 1827)	Cs	C	R
68	Northern Shovellar <i>Anas clypeata</i> (Linnaeus, 1758)	Wl	C	W
69	Storked Billed Kingfisher <i>Halcyon capensis</i> (Linnaeus, 1758)	Wl	C	R
70	Eurasian Eagle Owl <i>Bubo bubo</i> (Linnaeus, 1758)	Cs	O	R
71	Laughing dove <i>Streptopelia senegalensis</i> (Linnaeus, 1766)	Cs	C	R
72	Common moorhen <i>Gallinula chloropus</i> (Linnaeus, 1758)	Wl	C	R
73	Common Redshank <i>Tringa tetanus</i> (Linnaeus, 1758)	Wl	C	W
74	Common sandpiper <i>Actitis hypoleucos</i> (Linnaeus, 1758)	Wl	C	W
75	Little Stint <i>Calidris minuta</i> (Leisler chloropus, 1812)	Wl	C	W
76	Oriental Magpie Robin <i>Copsychus saularis</i> (Linnaeus, 1758)	Cs	C	R
77	Glossy ibis <i>Plegadis falcinellus</i> (Linnaeus, 1766)	Wl	O	W
78	Tree Pie <i>Dendrocitta vagabunda</i> (Latham, 1790)	Cs	O	R

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79	Grey Tit <i>Parus major</i> (Linnaeus, 1758)	Cs	C	R
80	Blackbird <i>Turdus merula</i> (Linnaeus, 1758)	Cs	C	R
81	Paradise Flycatcher <i>Terpsiphone paradisi</i> (Linnaeus, 1758)	Cs	X	R
82	Brahminiy Myna <i>Sturnus pagodarum</i> (Gmelin)	Cs	C	R
83	Weaver bird <i>Ploceus philippinus</i> (Linnaeus, 1766)	Cs	C	R
84	Dusky Crag martin <i>Hirundo concolor</i> (Sykes, 1832)	CS	C	R
85	Black Francolin <i>Francolinus francolinu</i> (Linnaeus, 1766)	Cs	C	R
87	Long Tailed Minivet <i>Pericrocotus ethologus</i> (Bangs & Phillips, 1914)	Cs	C	R
88	Black shouldered kite <i>Elanus caeruleus</i> (Desfontaines, 1789)	Cs	C	R
89	Brahminny kite <i>Haliastur indus</i> (Boddaert, 1783)	Cs	C	R
90	White –Browed Wagtail <i>Motacilla maderaspatensis</i> (Linnaeus, 1758)	Cs	O	R
91	Blue rock thrush <i>Monticola solitarius</i> (Linnaeus, 1758)	Cs	C	R
92	Indian robin <i>Saxicoloides fulicata</i> (Linnaeus, 1766)	Cs	C	R
93	Common stonechat <i>Saxicola torquata</i> (Linnaeus, 1766)	Cs	C	R
94	Paddy field pipit <i>Anthus rufulus</i> (Vieillot, 1818)	Cs	C	R

### Habitat Codes

Gr Grassland

Os Open scrub jungle

Cs Countryside / Cultivation

Wl Wetlands (river, streams, ponds, and reservoir)

### Frequency Codes

C Common

O Occasional

U Uncommon

X Rare

### Status Codes

R Resident

W Winter visitor

### Sightings of Special Interest

Purple Moorhen, Bronze-winged Jacana, Pheasant tailed Jacana, Lesser Florican, Paradise Flycatcher, Glossy Ibis were the sightings of special interest.

### Threats to the Area

Pollution, encroachment and urbanization are the major problems that the area faces.

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