

Current Status of Ornithofauna of Ambedkar Nagar, Uttar Pradesh, India

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ABSTRACT

Background: The bird diversity in many districts of Uttar Pradesh is still unexplored. Information on baseline data of species can be used to set priorities, allowing conservation effort to be focused on those species that need the most attention. This study was therefore undertaken to investigate the Ornithofauna of Ambedkar Nagar.

Methods: Extensive field surveys were undertaken in all the three season i.e. rainy, summer and winter. Line transects and point count methods were used for the bird counting.

Results: During the three years of study (November 2015–December 2018), a diverse variety of 170 bird species was discovered. The highest bird species belonged to family Passeridae (13) followed by Anatidae (12), Corvidae (12) and Muscicapidae (11). However, no particular site was discovered that could be identified as a birding spot in the district. The lakes such as Darvan, Hanswar, Devhat have the potential to support rich avifaunal diversity however they were under serious threats due to various anthropogenic activities.

Conclusion: The study reflects the potential of Ambedkar Nagar to support a rich diversity of ornithofauna. There was a need to reduce anthropogenic mortality of birds or to educate the public to support for and to implement remedial measures. The organization of bird watching events on various occasions such as World Wetlands Day, International Day for Biological Diversity and World Wildlife Week will draw the attention and interest of local people and youth. Further studies based on the ecology of threatened and endangered birds are needed.

Key-words: Anthropogenic, Diversity, Threats, Mortality, Ornithofauna

INTRODUCTION

As far as bird diversity is concerned, India is a blessed country. It has more than 1300 bird species which is over 13% of the world's bird species ^[1]. Uttar Pradesh has a rich and varied Ornithofauna of over 550 species ^[2]. Still, the bird diversity in many districts of Uttar Pradesh is still unexplored. This includes Ambedkar Nagar, a district in the Ayodhya division. Ambedkar Nagar was created on September 29, 1995, and was named in the memory of Dr. Bhim Rao Ambedkar.

Ideally, the forest must be at least 33% of the total geographical area, but as far as the study area is concerned the forest cover condition is in the distressing state. In 1995 there was 0.24% forest cover, which got reduced to 0.14% of the total geographical area in 2012. The situation was even worst in 2005 when the forest area in the district was just 0.11% ^[3]. The wild animals found in the district are not remarkable for either their number or variety. The ordinary species which occur to the south of the river Ghaghra includes jackals, foxes, wild boar. Ambedkar Nagar has been traditionally an agriculturally dominated area. Being an agrarian economy, domestic animals hold an important place in society. The natural vegetation is replaced by mixed vegetation that includes wild varieties with grove plantations. Due to fast habitat destruction and fragmentation, urbanisation, loss of forest and another natural system, mining, drainage of swamps, and other

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Wet lands are reducing the potential habitat of many birds. Information on baseline data of species can be used to set priorities, allowing conservation effort to be focused on those species that need the most attention. This study was therefore undertaken to investigate the Ornithofauna of Ambedkar Nagar.

MATERIALS AND METHODS

Study Area- The district carved out from Faizabad is situated in the eastern part of the state of Uttar Pradesh. The River Tamasa (Tons) divides the city of Ambedkarnagar into the two parts Akbarpur and

Shahzadpur. Akbarpur is a city and a municipal board. The total area of the district is 2350.0 Sq. Km. The rural area covers 2255.1 Sq. Km. and urban recorded 94.9 Sq. Km. It lies between 26° 09" N to 26° 40" N latitudes and 82°12" E to 83°05" E longitudes and bounded in the north by district Basti and Sant Kabir Nagar, in north-east by Gorakhpur, in south by Sultanpur, in the west by Faizabad (Ayodhya) and in the east by district Azamgarh (Fig. 1). The district is divided into nine development blocks namely Akbarpur, Katehri, Bhati, Tanda, Baskhari, Ramnagar, Jalalpur, Jahangirganj and Bhiyaon^[4].

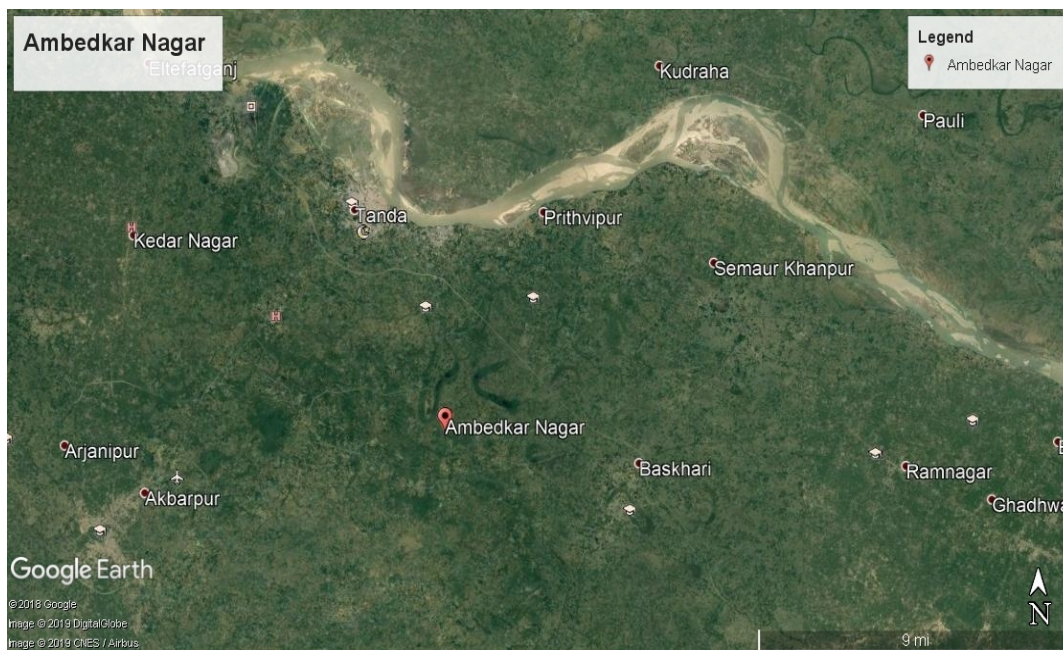


Fig. 1: Study Area (Source: GoogleEarth)

The study area has a number of rivers and streams. The principal rivers are the Ghagra, Tons and Majohi. There are numerous large and small lakes spread over the district like Devhat, Hanswar, and Darvan. The climatic condition of the district resembles that of eastern Uttar Pradesh that is characterized by a rhythm of seasons classified into winter Season (November to February), summer season (March to Mid June) and the rainy season (Mid June to October). The temperature in the summer season up to 45°C, while in winter temperature drops down up to 4°C. The average annual rainfall of the district was 1135.5 mm^[5].

To study the avifauna of Ambedkar Nagar an extensive survey of all the nine blocks of the district was done in all the three seasons i.e. rainy, summer and winter from November 2015 to December 2018. The birds were observed during the most active and specific time period of the day, i.e., early morning from 06:00 to 09:00 hours and in the evening from 16:00 to 18:00 hours in the summer while 07:00 to 10:00 hrs in the morning and 15:00 to 17:00 hrs in the winter. Line transects and points count methods were described by Verner^[6] and Bibby *et al.*^[7] were used for the bird counting. A transect of 50 metre length was selected and a 50-metre wide strip on each side of the transect was selected for bird counting. At each transect, birds were counted using a 10x50 mm binocular, based on their morphological

characteristics such as beak shape and colour, type of foot, the colour of shank, feathers, foot, and size of birds. Identification was carried out using standard literature ^[1,8,9]. For more authentications of species, photographs of birds were taken using 70 DSLR Camera. Furthermore, recorded birds were categorised according to their IUCN status such NA-Not Assessed, LC-Least Concern, NT-Near Threatened, V-Vulnerable, E-Endangered, CE-Critically Endangered. Based on the frequency of field observation, the abundance of birds was categorized as Common, Fairly common, Uncommon

and Rare. Questionnaire surveys were also made in the nearby villages and surrounding of the selected points.

RESULTS

On compiling the data it was found that the district has 170 bird species belonging to 48 families (Table 1). The highest bird species belonged to family Passeridae (13) followed by Anatidae (12), Corvidae (12) and Muscipidae (11). Only 1 or 2 species were recorded in 26 families (Fig. 2).

Table 1: List of bird species in Ambedkar Nagar

S. No.	Common name	Scientific name	Abundance Code	Family	IUCN Status
1.	Jungle bush quail	<i>Perdica asiatica</i>	UC		LC
2.	Grey Francolin	<i>Francolinus pondicerianus</i>	C	Phasianidae	LC
3.	Indian Peafowl	<i>Pavo cristatus</i>	C		LC
4.	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	C	Dendrocygnidae	LC
5.	Grey Lag Goose	<i>Anser anser</i>	C		LC
6.	Bar Headed Goose	<i>Anser indicus</i>	C		LC
7.	Ruddy Shelduck	<i>Tadorna ferruginea</i>	C		LC
8.	Comb Duck	<i>Sarkidiornis melanotos</i>	FC		LC
9.	Gadwal	<i>Anas strepera</i>	C		LC
10.	Eurasian Wigeon	<i>Anas penelope</i>	C		LC
11.	Spot Billed Duck	<i>Anas poecilorhyncha</i>	C	Anatidae	LC
12.	Northern Shoveler	<i>Anas clypeata</i>	C		LC
13.	Northern Pintail	<i>Anas acuta</i>	C		LC
14.	Common Teal	<i>Anas crecca</i>	C		LC
15.	Red Crested Pochard	<i>Rhodonessa rufina</i>	FC		LC
16.	Common Pochard	<i>Aythya ferina</i>	C		LC
17.	Small Buttonquail	<i>Turnix sylvatica</i>	UC	Turnicidae	LC
18.	Barred Buttonquail	<i>Turnix suscitator</i>	C		LC
19.	Eurasian Wryneck	<i>Jynx torquilla</i>	FC	Picidae	LC

S. No.	Common name	Scientific name	Abundance Code	Family	IUCN Status
20.	Brown Capped Pygmy Woodpecker	<i>Dendrocopos nanus</i>	FC		LC
21.	Black Rumped Flameback	<i>Dinopium benghalense</i>	C		LC
22.	Brown Headed Barbet	<i>Megalaima zeylanica</i>	FC	Megalaimidae	NA
23.	Coppersmith Barbet	<i>Megalaima haemacephala</i>	C		LC
24.	Indian Grey Hornbill	<i>Ocyrceros birostris</i>	FC	Bucerotidae	LC
25.	Common Hoopoe	<i>Upupa epops</i>	C	Upupidae	LC
26.	Indian Roller	<i>Coracias benghalensis</i>	C	Coraciidae	LC
27.	Common Kingfisher	<i>Alcedo atthis</i>	FC	Alcedinidae	LC
28.	White Throated Kingfisher	<i>Halcyon smyrnensis</i>	C	Halcyonidae	LC
29.	Stork-billed Kingfisher	<i>Halcyon capensis</i>	C		LC
30.	Pied Kingfisher	<i>Ceryle rudis</i>	C	Cerylidae	LC
31.	Green Bee Eater	<i>Merops orientalis</i>	C	Meropidae	LC
32.	Pied Cuckoo	<i>Clamator jacobinus</i>	FC		LC
33.	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	FC	Cuculidae	LC
34.	Asian Koel	<i>Eudynamis scolopacea</i>	C		LC
35.	Sirkeer Malkoha	<i>Phaenicophaeus leschenaultii</i>	UC		LC
36.	Greater Coucal	<i>Centropus sinensis</i>	C	Centropodidae	LC
37.	Alexandrine Parakeet	<i>Psittacula eupatria</i>	FC		LC
38.	Rose Ringed Parakeet	<i>Psittacula krameri</i>	C	Psittacidae	LC
39.	Plum Headed Parakeet	<i>Psittacula cyanocephala</i>	FC		LC
40.	House Swift	<i>Apus affinis</i>	C	Apodidae	LC
41.	Collared Scops Owl	<i>Otus bakkamoena</i>	FC		LC
42.	Brown Fish Owl	<i>Ketupa zeylonsis</i>	UC	Strigidae	LC
43.	Barn owl	<i>Tyto alba</i>	UC		LC

S. No.	Common name	Scientific name	Abundance Code	Family	IUCN Status
44.	Mottled wood owl	<i>Strix ocellata</i>	UC		LC
45.	Jungle Owlet	<i>Glaucidium radiatum</i>	FC		LC
46.	Spotted Owlet	<i>Athene brama</i>	FC		LC
47.	Rock Pigeon	<i>Columba livia</i>	C		LC
48.	Laughing Dove	<i>Streptopelia senegalensis</i>	C		LC
49.	Spotted Dove	<i>Streptopelia chinensis</i>	C		LC
50.	Eurasian Collard Dove	<i>Streptopelia decaocto</i>	C	Columbidae	LC
51.	Red Collared Dove	<i>Streptopelia tranquebarica</i>	FC		LC
52.	Yellow Footed Green Pigeon	<i>Treron phoenicoptera</i>	C		LC
53.	Sarus Crane	<i>Grus antigon</i>	UC	Gruidae	NT
54.	White Breasted Waterhen	<i>Amaurornis phoenicurus</i>	C		LC
55.	Purple Swamphen	<i>Porphyrio porphyrio</i>	C	Rallidae	LC
56.	Common Moorhen	<i>Gallinula chloropus</i>	C		LC
57.	Common Coot	<i>Fulica atra</i>	C		LC
58.	Common snipe	<i>Gallinago gallinago</i>	FC		LC
59.	Common Redshank	<i>Tringa totanus</i>	C		LC
60.	Common GreenShank	<i>Tringa nebularia</i>	C	Scolopacidae	LC
61.	Green Sandpiper	<i>Tringa ochropus</i>	FC		LC
62.	Wood Sandpiper	<i>Tringa glareola</i>	C		LC
63.	Common Sandpiper	<i>Actitis hypoleucos</i>	C		LC
64.	Pheasant tailed jacana	<i>Hydrophasianus chirurgus</i>	C	Jacanidae	LC
65.	Bronze Winged Jacana	<i>Metopidius indicus</i>	C		LC
66.	Eurasian Thick Knee	<i>Burhinus oedicnemus</i>	C	Burhinidae	LC
67.	Black Winged Stilt	<i>Himantopus himantopus</i>	C	Charadriidae	LC
68.	Little Ringed Plover	<i>Charadrius dubius</i>	C		LC

S. No.	Common name	Scientific name	Abundance Code	Family	IUCN Status
69.	Yellow Wattled Lapwing	<i>Vanellus malarbaricus</i>	UC		NA
70.	River Lapwing	<i>Vanellus duvaucelii</i>	FC		NT
71.	Red Wattled Lapwing	<i>Vanellus indicus</i>	C		LC
72.	Small Pratincole	<i>Glareola lactea</i>	FC	Glareolidae	LC
73.	River tern	<i>Sterna aurantia</i>	FC	Laridae	NT
74.	Oriental Honey Buzzard	<i>Pernis ptilorhyncus</i>	FC		LC
75.	Osprey	<i>Pandion haliaetus</i>	FC		LC
76.	Black Shouldered Kite	<i>Elanus caeruleus</i>	FC		LC
77.	Black Kite	<i>Milvus migrans</i>	C	Accipitridae	LC
78.	Egyptian Vulture	<i>Neophron percnopterus</i>	FC		E
79.	Shikra	<i>Accipiter badius</i>	C		LC
80.	White Eyed Buzzard	<i>Butastur teesa</i>	FC		LC
81.	Eurasian Marsh harrier	<i>Circus aeruginosus</i>	C		LC
82.	Little Grebe	<i>Tachybaptus ruficollis</i>	C	Podicipedidae	LC
83.	Darter	<i>Anhinga melanogaster</i>	FC	Anhingidae	NT
84.	Little Cormorant	<i>Phalacrocorax niger</i>	C	Phalacrocoracidae	LC
85.	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	C		LC
86.	Great Cormorant	<i>Phalacrocorax carbo</i>	FC		LC
87.	Purple Heron	<i>Ardea purpurea</i>	C		LC
88.	Grey Heron	<i>Ardea cinerea</i>	C		LC
89.	Little Egret	<i>Egretta gargetta</i>	C		LC
90.	Great Egret	<i>Casmerodius albus</i>	C		LC
91.	Intermediate Egret	<i>Mesophoyx intermedia</i>	C	Ardeidae	LC
92.	Cattle Egret	<i>Bubulcus ibis</i>	C		LC
93.	Indian Pond Heron	<i>Ardeola grayii</i>	C		LC
94.	Little Heron	<i>Butorides straitus</i>	UC		LC
95.	Black Crowned Night Heron	<i>Nycticorax nycticorax</i>	FC		LC

S. No.	Common name	Scientific name	Abundance Code	Family	IUCN Status
96.	Black Ibis	<i>Pseudibis papillosa</i>	FC		LC
97.	Glossy ibis	<i>Plegadis falcinellus</i>	FC	Threskiornithidae	LC
98.	Black-headed ibis	<i>Threskiornis melanocephalus</i>	FC		NT
99.	Painted Stork	<i>Mycteria leucocephala</i>	C		NT
100.	Asian Openbill	<i>Anastomus oscitans</i>	FC		LC
101.	Woolly Necked Sork	<i>Ciconia episcopus</i>	FC	Ciconiidae	V
102.	Black Necked Stork	<i>Ephippiorhynchus asiaticus</i>	C		NT
103.	Lesser Adjutant	<i>Leptoptilos javanicus</i>	UC		NT
104.	Long Tailed Shrike	<i>Lanius schach</i>	C	Laniidae	LC
105.	Bay-backed Shrike	<i>Lanius vittatus</i>	FC		LC
106.	Rufous Treepie	<i>Dendrocitta vagabunda</i>	C		LC
107.	House Crow	<i>Corvus splendens</i>	C		LC
108.	Large Billed Crow	<i>Corvus macrorhynchos</i>	C		LC
109.	Eurasian Golden Oriole	<i>Oriolus oriolus</i>	C		LC
110.	Black Hooded Oriole	<i>Oriolus xanthornus</i>	FC		LC
111.	Large Cuckoo shrike	<i>Coracina macei</i>	UC	Corvidae	LC
112.	Small Minivet	<i>Pericrocotus cinnamomeus</i>	FC		LC
113.	White-browed fantail	<i>Rhipidura aureola</i>	FC		LC
114.	Black Drongo	<i>Dicrurus macrocercus</i>	C		LC
115.	Common Iora	<i>Aegithina tiphia</i>	FC		LC
116.	Common Woodshrike	<i>Tephrodornis pondicerianus</i>	FC		LC
117.	Asian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	FC		LC
118.	Oriental Magpie Robin	<i>Copsychus saularis</i>	C		LC
119.	Indian Robin	<i>Saxicoloides fulicata</i>	C		LC
120.	Black Redstart	<i>Phoenicurus ochruros</i>	FC	Muscicapidae	LC
121.	Pied Bushchat	<i>Saxicola caprata</i>	C		LC
122.	Brown Rock Chat	<i>Cercomela fusca</i>	FC		LC

S. No.	Common name	Scientific name	Abundance Code	Family	IUCN Status
123.	Common Stonechat	<i>Saxicola torquata</i>	C		LC
124.	Red-throated flycatcher	<i>Ficedula parva</i>	FC		LC
125.	Verditer flycatcher	<i>Eumyias thalassina</i>	FC		LC
126.	Tickell's Blue flycatcher	<i>Cyornis tickelliae</i>	FC		LC
127.	Grey-headed canary flycatcher	<i>Culicicapa ceylonensis</i>	FC		LC
128.	Bluethroat	<i>Luscinia svecica</i>	FC		LC
129.	Brahminy Starling	<i>Sturnus pagodarum</i>	C		LC
130.	Chestnut-tailed Starling	<i>Sturnus malabaricus</i>	FC		LC
131.	Jungle mynah	<i>Acridotheres fuscus</i>	FC	Sturnidae	LC
132.	Asian Pied Starling	<i>Sturnus contra</i>	C		LC
133.	Common Mynah	<i>Acridotheres ginginianus</i>	C		LC
134.	Bank Mynah	<i>Acridotheres ginginianus</i>	C		LC
135.	Great Tit	<i>Parus major</i>	FC	Paridae	LC
136.	Plain Martin	<i>Riparia rupestris</i>	FC		LC
137.	Barn Swallow	<i>Hirundo rustica</i>	C		LC
138.	Wire Tailed Swallow	<i>Hirundo smithii</i>	FC	Hirundinidae	LC
139.	Streak-throated swallow	<i>Hirundo fluvicola</i>	FC		LC
140.	Red Whiskered Bulbul	<i>Pycnonotus jocosus</i>	C	Pycnonotidae	LC
141.	Red Vented Bulbul	<i>Pycnonotus cafer</i>	C		LC
142.	Zitting Cisticola	<i>Cisticola juncidis</i>	FC		LC
143.	Grey Breasted Prinia	<i>Prinia hodgsonii</i>	FC	Cisticolidae	LC
144.	Ashy Prinia	<i>Prinia socialis</i>	C		LC
145.	Plain Prinia	<i>Prinia inornata</i>	C		LC
146.	Oriental White Eye	<i>Zosterops palpebrosus</i>	C	Zosteropidae	LC
147.	Common Tailorbird	<i>Orthotomus sutorius</i>	C	Sylviidae	LC

S. No.	Common name	Scientific name	Abundance Code	Family	IUCN Status
148.	Common Chiffchaff	<i>Phylloscopus collybita</i>	C		LC
149.	Hume's Lesser Whitethroat	<i>Sylvia althaea</i>	FC		LC
150.	Yellow Eyed Babbler	<i>Chrysomma sinense</i>	C		LC
151.	Common Babbler	<i>Turdoides caudatus</i>	FC		LC
152.	Large Grey Babbler	<i>Turdoides malcolmi</i>	C		LC
153.	Jungle Babbler	<i>Turdoides straitus</i>	C		LC
154.	Indian Bushlark	<i>Mirafra erythroptera</i>	FC	Alaudidae	LC
155.	Oriental Skylark	<i>Alauda gulgula</i>	C		LC
156.	Ashy-crowned sparrow lark	<i>Eremopterix grisea</i>	FC	Alaudidae	LC
157.	Purple Sunbird	<i>Nectarinia asiatica</i>	C	Nectariniidae	LC
158.	House Sparrow	<i>Passer domesticus</i>	C		LC
159.	Chestnut Shouldered Petronia	<i>Petronia xanthocollis</i>	FC		LC
160.	White Wagtail	<i>Motacilla personata</i>	C		LC
161.	Cristine Wagtail	<i>Motacilla calcarata</i>	C		LC
162.	Yellow Wagtail	<i>Motacilla thunbergi</i>	C		LC
163.	Grey Wagtail	<i>Motacilla cinerea</i>	FC		LC
164.	Paddy field Pipit	<i>Anthus rufulus</i>	C	Passeridae	LC
165.	Olive-backed Pipit	<i>Anthus hodgsoni</i>	FC		LC
166.	Baya Weaver	<i>Ploceus philippinus</i>	C		LC
167.	Black-breasted weaver	<i>Ploceus benghalensis</i>	FC		LC
168.	Red Avadavat	<i>Amandava amandava</i>	FC		LC
169.	Indian Silverbill	<i>Lonchura malabarica</i>	C		LC
170.	Scaly Breasted Munia	<i>Lonchura punctulata</i>	FC		LC

C-Common; FC-Fairly Common; UC-Uncommon; NA-Not Assessed; LC-Least Concern; NT-Near Threatened; V-Vulnerable; E-Endangered

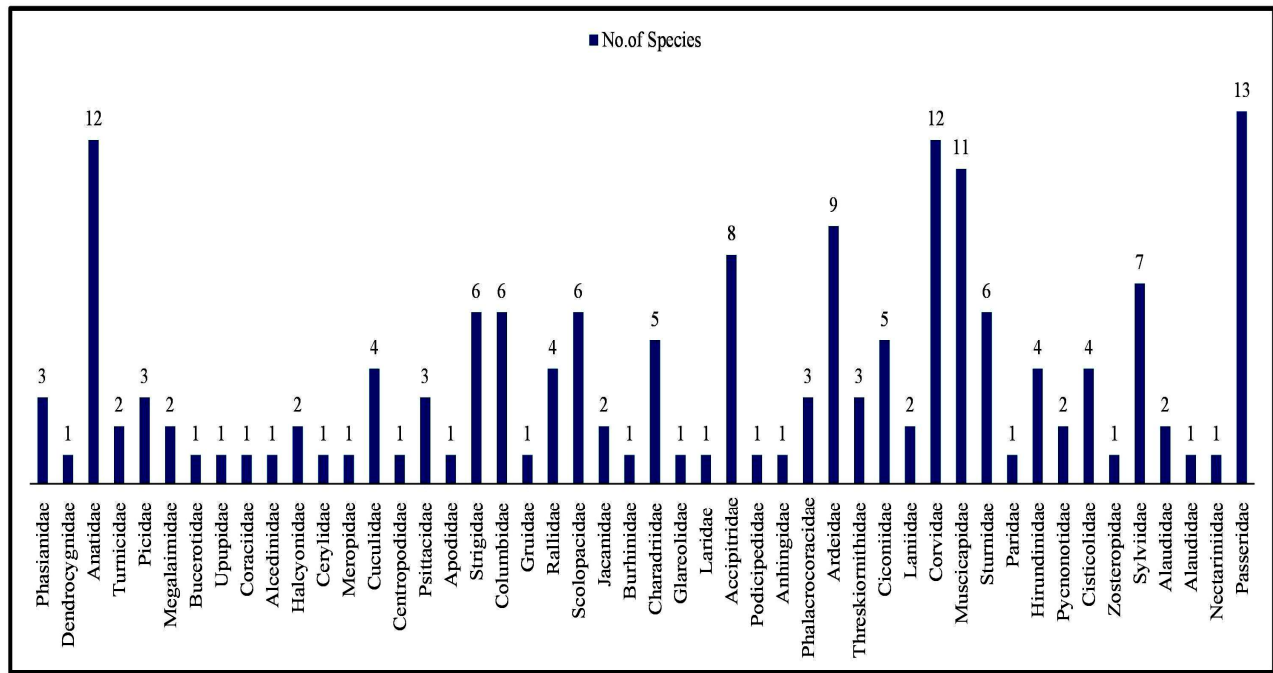


Fig. 2: Total of 170 bird species belonging to 48 families

Amongst the 170 species, 11 were Uncommon, 64 were fairly common and rest 95 species were common (Fig. 5a-o), i.e only 6% of the birds were uncommon (Fig. 3). The least concerned category included 158 bird species (Fig. 4). According to the IUCN status, 1 sp. was

endangered, 8 near Threatened, 1 Vulnerable. For 2 species, data was Not Available (Fig. 6a-f). The most common birds recorded were crows, House sparrows, Parakeets, Yellow-footed green pigeons, lapwings, munias, bulbuls, mynas and Baya weaver.

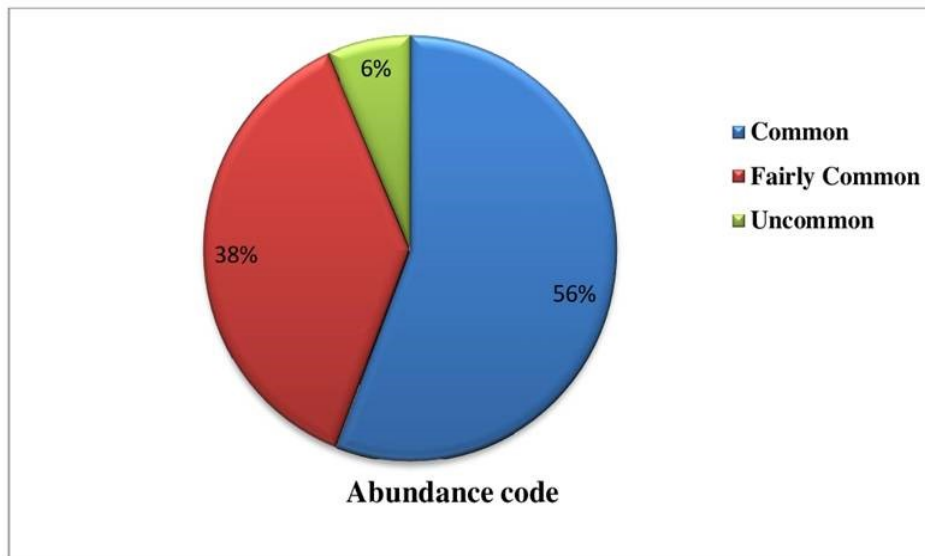


Fig. 3: Common, Fairly Common, Uncommon birds

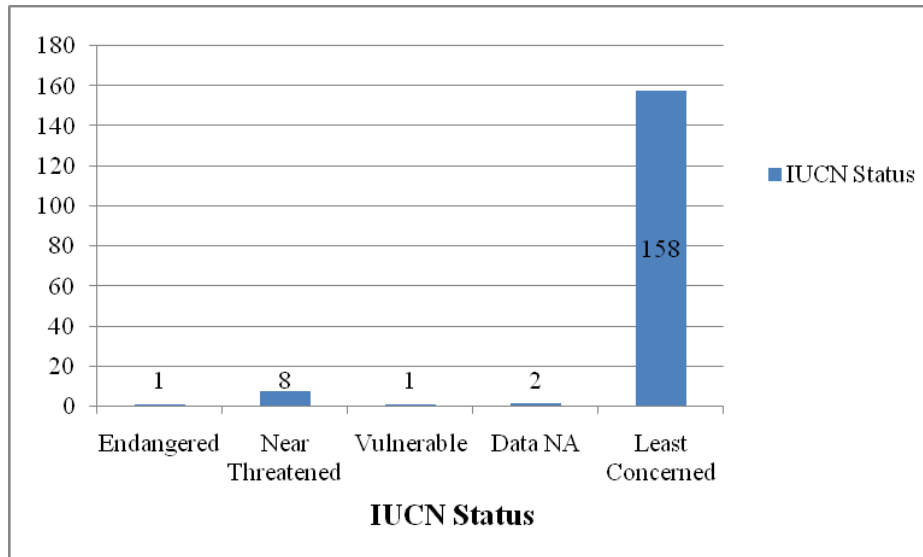


Fig. 4: IUCN Status of bird species



a. Chestnut Shouldered Petronia



a. Great Tit



c. Ashy-crowned sparrow lark



d. Grey-headed canary flycatcher



e. Scaly-breasted munia



f. Small Pratincole



g. Collared Scops Owl



h. Jungle owlet



i. White eyed buzzard



j. Eurasian Wryneck



k. Yellow wattled lapwing



l. Red Blackstart



m. Grey Hornbill



n. River Lapwing



o. Plum-headed Parakeet

Fig. 5a-o: Some Uncommon and Fairly common birds in Ambedkar Nagar



a. River Tern



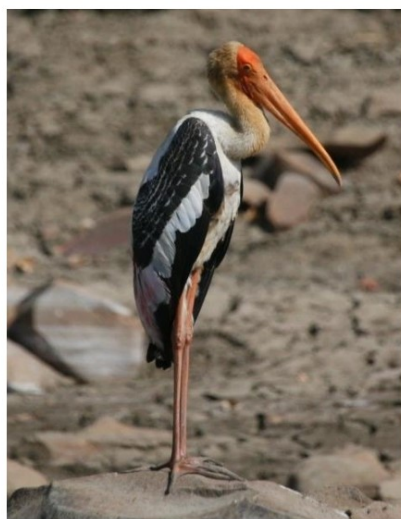
b. Alexandrine Parakeet



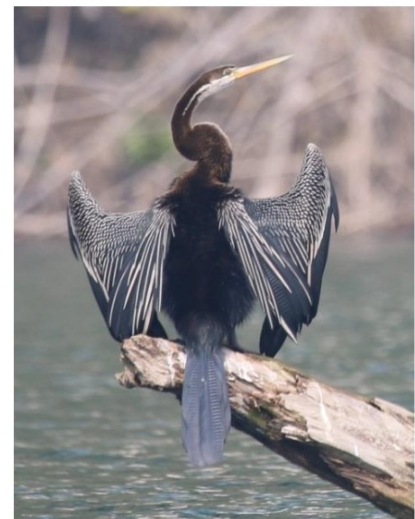
c. Egyptian Vulture



d. Lesser adjutant



e. Painted Stork



f. Darter

Fig. 6a-f: Some Endangered, Near Threatened and Vulnerable species

The Indian National bird “Peacock” and the State bird of Uttar Pradesh “Sarus Crane” were easily spotted birds in almost all the tehsils of the district (Fig. 7a & b). Though the Census for Sarus cranes undertaken in 2010 by Forest Department reported zero data for Ambedkar Nagar ^[10], they were also seen nesting in the small local

village ponds and also in rice fields. Similarly, no vultures had been reported in the district so far ^[11], but the Endangered Egyptian Vultures were also sighted occasionally (Fig. 6c). The district had no dense forest coverage and hilly terrain, therefore, the birds of rocky and cliff habitats were not recorded during the study.



Fig. 7a: Indian National bird “Peacock”



Fig. 7b: State bird of Uttar Pradesh “Sarus Crane”

DISCUSSION

Ambedkar Nagar, being an agricultural dominant area, the majority of birds reported was those that inhabit an agricultural landscape. There is growing interest in avian diversity in the agricultural area ^[12-18]. Such studies were useful in the management and conservation of useful bird species and control of pest birds. Sarus cranes were mostly observed in the crop fields and only a few pairs

were seen in small unprotected local ponds. Due to the deterioration and destruction of natural wetland habitats, Sarus cranes were increasingly being forced into agricultural fields all over its distribution range in India ^[19]. Most of the districts have at least one or two locates that have important birding sites ^[20-22]; however, no particular site was discovered that could be identified as a birding spot in the district. The lakes such as Darvan,

Hanswar, Devhat had the potential to support rich avifaunal diversity conversely they were under serious threats due to various anthropogenic activities. Various anthropogenic activities like uses of pesticides and insecticides in agriculture, deforestation, livestock grazing, hunting, fishing, development of industries and urbanization, sound pollution are some of the key threats to the avian diversity^[23]. The majority of the aquatic birds were migratory; various types of ducks visit the lakes at the beginning of the winter. However, the numbers were low. The basic requirements of migratory birds at their wintering ground are adequate food supply and safety^[24], which was not fulfilled by the water bodies in Ambedkar Nagar. Intensification of agriculture and use of an excess of pesticides have severely affected the faunal diversity of the wetlands^[25, 26]. The wetlands being neglected by the local people and the concerned authorities may soon be lost forever.

CONCLUSIONS

The study reflects the potential of Ambedkar Nagar to support a rich diversity of ornithofauna. Further studies based on the ecology of threatened and endangered birds such as Egyptian Vultures, Sarus crane, Alexandrine Parakeet, Woolly-necked stork and many more species are needed. As for the conservation of habitat, the extremely low forest cover and anthropogenic activities around the wetlands are serious problems that need immediate concern and elucidation.

The district demands regular monitoring and reporting of incidences related to birds. There is a need to reduce anthropogenic mortality of birds or to educate the public to support for and to implement remedial measures. The organization of bird watching events on various occasions such as World Wetlands Day, International Day for Biological Diversity and World Wildlife Week will draw the intention and interest of local people and youth.

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