

Research Article

Composition and Conservation Status of Avifauna in Urban Non-protected Important Bird Area (IBA) Site of Western India

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ABSTRACT

Kumbharwada wetland, an Important Bird Area (IBA) component in Bhavnagar, Gujarat, India, is a crucial wintering ground for migratory birds. Long-term monitoring of the avian community over a period of long time-frame is an excellent way to examine the health of this IBA site and thus provide an important ground to foster the conservation of birds in the region and management of this wetland. Given this consideration, field surveys were carried out from December 2020 to May 2023, following point count method to study the avian species richness in the study area. A total of 204 bird species belonging to 20 orders and 56 families are recorded, of which 85 species are migratory and 119 are resident. Anatidae is the most species-rich avian family (16 species). Highest number of species was recorded in the month of January (165 species in 2021 and 163 species in 2022). This wetland supports 107 (52.45%) wetland-associated species and 97 (47.55%) terrestrial species of birds. Twelve species are considered as Near Threatened, four species as Vulnerable and one species (*Aquila nipalensis*) as Endangered in IUCN Red List of Threatened Species. Four species (*Sterna aurantia*, *Mycteria leucocephala*, *Phoeniconaias minor*, and *Threskiornis melanocephalus*) with globally declining trend, are commonly seen in the study area, which shows that the wetland is a crucial habitat for bird species with high conservation priorities. Industrialization, encroachment, discharge of sewage water and chemical effluents, high-tension powerlines, stray dogs, and expansion of exotic vegetation remained the major threats to the habitat and avian community.

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INTRODUCTION

Wetlands are highly productive and dynamic ecosystems that play a crucial role in our natural environment (Ghermandi et al. 2010; Hu et al. 2017). Wetlands are referred to as land transitional between the terrestrial and aquatic habitats (Mitsch & Gosselink 2000). Wetlands are critical habitat for avian diversity. Out of 1353 bird species with 38 endemic species recorded from India (Praveen & Jayapal 2023), 310 species are found to be wetland birds (Kumar et al. 2005). Birds are widely considered as an important taxon for wetlands. Their presence and activities have profound positive impacts on the health of these ecosystems. They play a vital role in maintenance of aquatic biodiversity, insect pest con-

trol, nutrient cycling as well as ecosystem functioning (Green & Elmberg 2014; Kumar et al. 2016). Furthermore, birds show a high sensitivity to the structural changes in their habitats, making them an important bio-indicators for examining the quality, productivity, and stability of wetland habitats (Morrison 1986; Bhat et al. 2009).

Being located along the Central Asian Flyway, wetlands of India are crucial wintering grounds for migratory birds (Kumar et al. 2016). The semi-arid parts of the western India have biodiverse wetland habitats. Approximately 17.56% geographical area of the Gujarat is comprised of wetlands (SAC 2010) with 4 Ramsar sites (Gujarat Ecology Commission 2022) and 19 Important Bird Areas (IBA) (Rahmani et al. 2016). The Kumbharwada wetland is part of one such IBA (Salt pans of Bhavnagar, Site code: IN093) situated in the Bhavnagar city of the Gujarat. It is currently taken over by extensive network of salt pans which have created an important habitat for waterbirds and are now being utilized by various avian species as a wintering ground (Rahmani et al. 2016), which were once occupied by a few waterfowl (Dharmakumarsinhji 1973). Formerly, some studies have been conducted in the Bhavnagar region pertaining to avian diversity (Dodia & Chavda 2012; Makwana & Dodia 2022; Khatsuriya et al. 2023). Particularly, 71 species of birds have been recorded (Parekh & Gadhvi 2013) from the Kumbharwada wetland and 161 species from the Salt pans of Bhavnagar (Rahmani et al. 2016). However, Kumbharwada wetland is facing increasing threats of industrialization, encroachment due to urbanization, pollution of water attributed to discharge of untreated domestic sewage and chemical effluents and a network of high-tension powerlines. These anthropogenic activities not only deteriorate the water quality but also exert severe consequences on avian populations, leading to alterations in the structure and composition of the avian community and a decline in their abundance (Reginald et al. 2007; Kumar & Sharma 2019).

The species richness and abundance of wetland birds have been found to be affected by several wetland features such as topography, size, water depth, water quality, availability of food, suitable roosting and nesting sites, as well as the presence of predators and inter-species competitors (Mukherjee et al. 2002; Ma et al. 2010). Therefore, the monitoring of bird assemblages holds substantial importance in evaluating the integrity and functions of wetland ecosystems and plays a crucial role in designing appropriate conservation and management implications to ensure sustainable biodiversity conservation (Lee et al. 2004; Sundar & Kittrur 2013). Obtaining information on the composition and abundance of avian communities is essential for understanding the importance of regional or local landscapes in conservation of avian diversity (Kattan & Franco 2004; Bibi & Ali 2013). Despite being a heaven for birds, the information about the status of avian assemblages in this wetland is still limited and sporadic. The primary objective of the present study lies in assessing the species diversity, with a particular focus on threats associated with the habitat as well as globally threatened bird species within the study area. This region holds utmost significance as one of the key Important Bird Areas (IBAs) in Gujarat.

MATERIALS AND METHODS

Study area

The present study was conducted in Bhavnagar, Gujarat, India, where the Kumbharwada wetland ($21^{\circ}46'54.84"N$, $72^{\circ}6'10.34"E$) is located on the northern-western outskirts of the city (Figure 1). It is a component of Important Bird Area (IBA) site IN093 comprising variety of habitats for birds including marshland with hydrophytic vegetation, open waters,

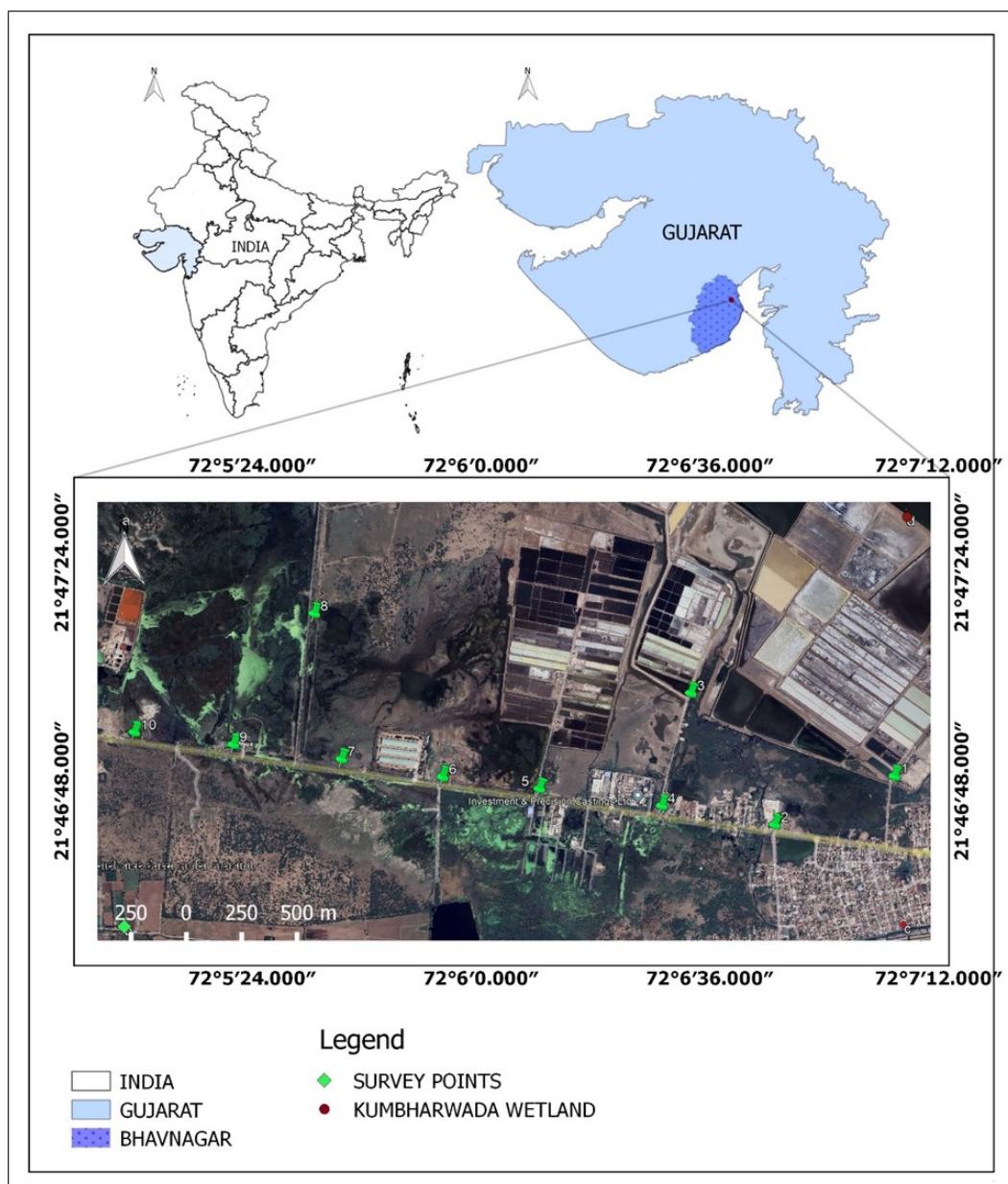


Figure 1. Map of study area in Kumbharwada wetland, Bhavnagar, Gujarat, India.

grassy patches, muddy areas, dry saline parts, thorny vegetation, and network of saltpans. Hydrophytic vegetation includes submerged (*Hydrilla* sp., *Potamogeton* sp.) and emergent macrophytes (*Typha* sp., *Fimbrystylis* sp.). Thorny vegetation is dominated by *Prosopis juliflora*, some sparsely distributed species like *Salvadora* sp. and *Zizyphus* sp. are also found at the study area. Some other important plant species include *Suaeda* sp., *Sporobolus* sp., *Chloris* sp. The map of the study area was prepared with the help of QGIS (version 2.18.14) open-source software.

Data Collection

The point count method was used to detect the bird species present in the study area for a fixed duration of time as it is suitable for the species-rich habitat with higher population density (Sutherland et al. 2005). The study area was divided into ten survey points, which were at minimum of 300 m apart from each other (Figure 1). Surveys were carried out twice a month between December 2020 to May 2023 comprising 60 observations during the study period. All these points were surveyed to record the species richness and assemblage of birds in the study area between 6:00 to 10:00 AM and 03:30 to 07:30 PM. Birds were observed unaidedly or

with a binocular (Nikon ACULON A211 10x50), a spotting scope (Nikon 20-60 x 80) and Nikon B700 point-and-shoot camera. Identification as well as the residential status (Resident or Migratory) and habitat use (Wetland associated or Terrestrial) were done using the field guide and available scientific resources ([del Hoyo et al. 2014](#); [Grimmett et al. 2016](#); [Birds of the World 2022](#)). Taxonomic classification and Names of the birds were followed from [Praveen & Jaypal \(2023\)](#).

Data Analysis

The occurrence of the species was studied and classified them into four categories namely Common (C-species recorded in 80-100% of field visits), Uncommon (U-species recorded in 50-79.9% of field visits), Occasional (O-species recorded in 20-49.9% of field visits) and Rare (R-species recorded in <19.9 % of field visits) following [Mazumdar \(2019\)](#). The IUCN status of birds and its global population trend was also noted to compare with the regional and local status ([IUCN 2023](#)). During the surveys, information related to the threats associated with birds and habitat along with conservation management was noted by direct observations. Threats are defined as the factors causing adverse impacts on the avian species richness and the overall wetland habitat identified from similar previous studies ([Kumbhar & Mhaske 2023](#)). Study period was divided into four seasons in a year viz. Winter (Dec-Feb), Summer (Mar-May), Monsoon (Jun-Aug), and Post monsoon (Sep-Nov) and the species richness data corresponding to these seasons were also recorded. Year-1 represents December 2020 to November 2021 and Year-2 represents December 2021 to November 2022. Results comprising a comprehensive analysis based on two years of data (December 2020 to November 2022) for consistency, with a final checklist compiled from 30 Months of study period starting from December 2020 to May 2023. Charts and Graphs were prepared using the MS Excel 2019.

RESULTS & DISCUSSION

Species Richness

The present study recorded 204 species of birds belonging to 20 orders and 56 families from the Kumbharwada wetland, Bhavnagar (Table 1/ Appendix 1). During this study, highest number of species belonged to order Passeriformes (63 species), followed by Charadriiformes (43 species), Pelecaniformes (17 species), Anseriformes (16 species), Accipitriiformes (13 species), and others. Almost three-fourth (74.5%) of the species recorded during the study belonged to these five orders. Out of which three orders (viz. Charadriiformes, Pelecaniformes and Anseriformes) comprise the wetland-associated species. Family Anatidae was the most diverse avian family comprising 16 species. There were 17 families found to have only single species in the study area (Appendix 1).

Habitat utilization, Migratory status and Seasonal variation in avian assemblage

Highest number of species was reported during January (165 species in 2021, 163 species in 2022) and least during May (68 species in 2021, 65 species in 2022) as shown in Figure 2. Out of the total species recorded during the study period, 85 species (41.67%) were migratory and 119 species (58.33%) were resident (Figure 3a). Migratory birds utilize this habitat as their wintering ground. During winter season, number of migratory species recorded was 76 in year-1 and 75 species in year-2. The birds start departing for return migration from Kumbharwada wetland during the last week of March. The migratory species of birds varied in

Table 1. Status of avifauna recorded at Kumbharwada wetland, India.

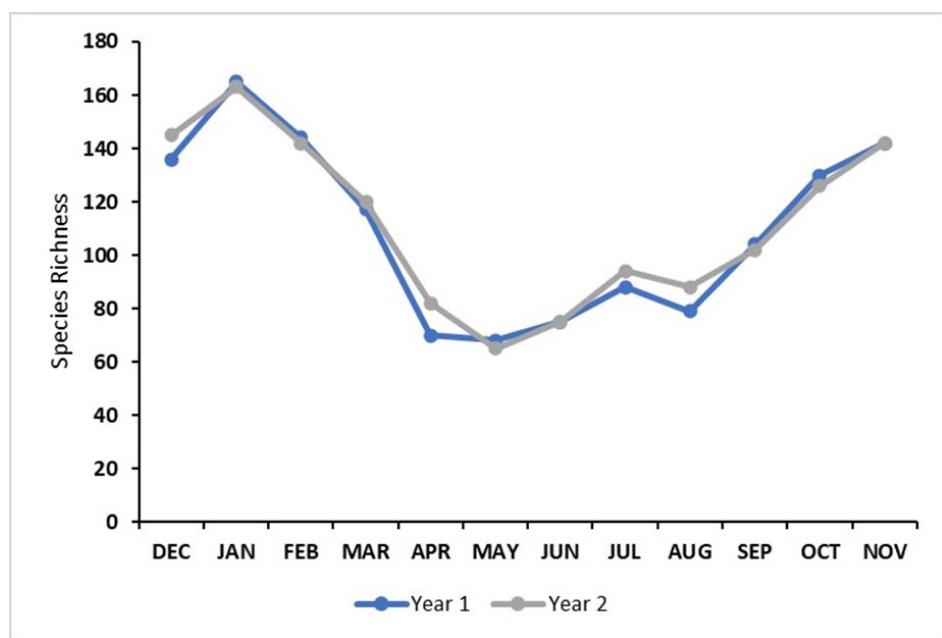
Order	Family	Genus	Species	Residential Status		Occurrence			IUCN Status				
				Re	M	C	U	O	R	EN	VU	NT	LC
Anseriformes	1	9	16	4	12	3	11	0	2	0	1	0	15
Galliformes	1	3	4	3	1	1	0	2	1	0	0	0	4
Phoenicopteriformes	1	2	2	2	0	2	0	0	0	0	0	1	1
Podicipediformes	1	2	2	1	1	1	0	0	1	0	0	0	2
Columbiformes	1	3	5	5	0	3	0	1	1	0	0	0	5
Cuculiformes	1	4	4	3	1	2	1	1	0	0	0	0	4
Caprimulgiformes	2	2	2	2	0	1	1	0	0	0	0	0	2
Gruiformes	2	7	9	5	4	4	1	2	2	0	0	0	9
Charadriiformes	9	26	43	15	28	12	8	12	11	0	1	4	38
Ciconiiformes	1	2	2	2	0	1	0	1	0	0	0	1	1
Suliformes	2	3	4	4	0	0	2	2	0	0	0	1	3
Pelecaniformes	3	12	17	15	2	9	5	1	2	0	0	2	15
Accipitriformes	2	10	13	5	8	0	3	9	1	1	2	1	9
Strigiformes	2	2	2	2	0	1	0	0	1	0	0	0	2
Coraciiformes	3	5	8	6	2	3	1	1	3	0	0	0	8
Piciformes	2	2	2	1	1	0	1	0	1	0	0	0	2
Falconiformes	1	1	3	1	2	0	0	3	0	0	0	1	2
Psittaciformes	1	1	2	2	0	1	0	1	0	0	0	1	1
Passeriformes	19	38	63	41	22	16	20	16	11	0	0	0	63
Bucerotiformes	1	1	1	0	1	0	0	1	0	0	0	0	1
Total 20	56	135	204	119	85	60	54	53	37	1	4	12	187

Note: Re-Residential, M-Migratory; C-Common, U-Uncommon, O-Occasional, R-Rare

IUCN-International Union for Conservation of Nature and Natural Resources,

EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern

different seasons and their richness shown an increase from post-monsoon, reaching its peak in winter, and subsequently declined in summer and was lowest in monsoon seasons (Figure 5). The species richness of the resident birds, exhibited no discernible seasonal fluctuation and remained similar over the course of the study period (Figure 5).

**Figure 2.** Species Richness of avifauna at Kumbharwada wetland, India.

Kumbharwada wetland is one of the most productive wetlands of Bhavnagar city ([Parekh & Gadhvi 2013](#)). More than half (52.45%) of the bird species found in Kumbharwada are wetland-associated, which sur-

vive in the marshland, open water, and saltpans of this wetland habitat. Besides, 47.55% of terrestrial avian species reside in the bushes, thorny scrubland dominated by *Prosopis juliflora*, some of the trees and dry saline parts. Anatidae and Scolopacidae are two of the most diverse families in Kumbharwada wetland similar to other studies in wetland habitats (Parekh & Gadhvi 2013; Mazumdar 2019; Makwana & Dodia 2022; Khatsuriya et al. 2023) and IBAs (Changder et. al. 2015; Rai et. al. 2017; Mahanta et. al. 2019). Wetland birds like geese, ducks, swans, and some resident aquatic avifauna rely on wetland plants for food, consuming various plant materials like roots, shoots, foliage, fruits, and seeds of floating, submerged or emergent vegetation (Ali & Ripley 1987; Rahmani & Islam 2008). In Kumbharwada wetland, variety of different habitats within the wetland area is probably one of the important factors responsible for high species richness of birds.

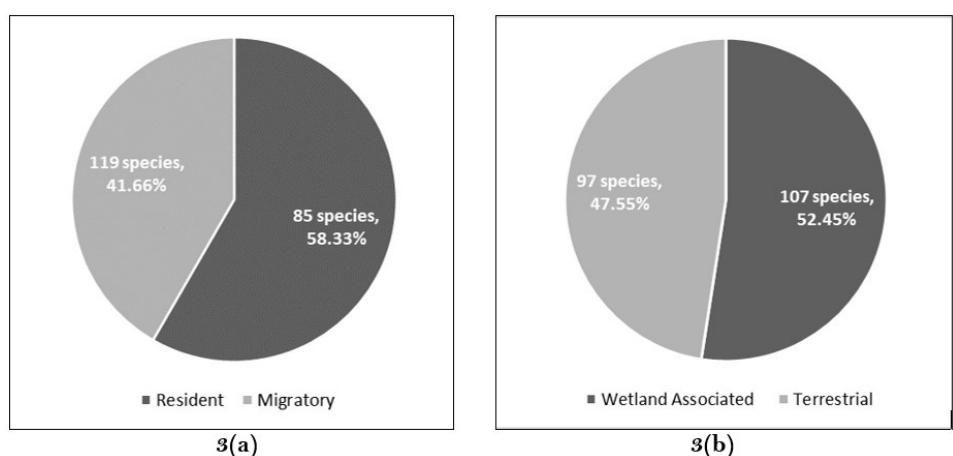


Figure 3. Proportion of (a) Resident and Migratory, (b) Wetland-associated and Terrestrial avifauna at Kumbharwada wetland, India.

Out of 204 species, 107 species (52.45%) were wetland-associated and 97 species (47.55%) were terrestrial (Figure 3b). Seasonal variation in wetland-associated species was clearly depicted (Figure 4). The highest count was recorded during the winter seasons, mainly attributed to the arrival of migratory waders and waterfowls. The numbers gradually increased from the post-monsoon season, reaching their peak during winter, and then declined during the summer, reaching their lowest during the monsoon seasons.

Kumbharwada wetland is crucial wintering ground for the migratory birds. In winter season, waterfowls and waders are distributed throughout the habitat as water was available in most of the parts. Winter visitors start appearing in mid-September, subsequently increasing in October, reaching to its peak in January, then steadily decrease and depart from the wetland by early April. Therefore, with the onset of the winter season, many migratory waterfowls and waders arrive at the Kumbharwada wetland, which in result shows significant seasonal variation in species richness of wetland-associated species. Many parts of the Kumbharwada wetland had dried up in the summer seasons and the availability of water become scarce and patchy, resulting in clumped dispersal of the birds (Figure 4). In June, all other migratory birds leave the Kumbharwada wetland except four species in year-1 and five species during year-2.

Apart from the migratory avifauna, Kumbharwada wetland serves as a crucial habitat for the resident aquatic as well as terrestrial species. Seasonal variation in species richness of resident terrestrial and wetland-associated avifauna did not show any significant variation, which indi-

cates that these species are dependent on this habitat throughout the year to survive. The species richness of any wetland habitat depends on the water quality and surrounding vegetation for the survival of any species (Buckton 2007). Therefore, appropriate management of water availability and quality is very critical for the protection and conservation of the avian community inhabiting this wetland.

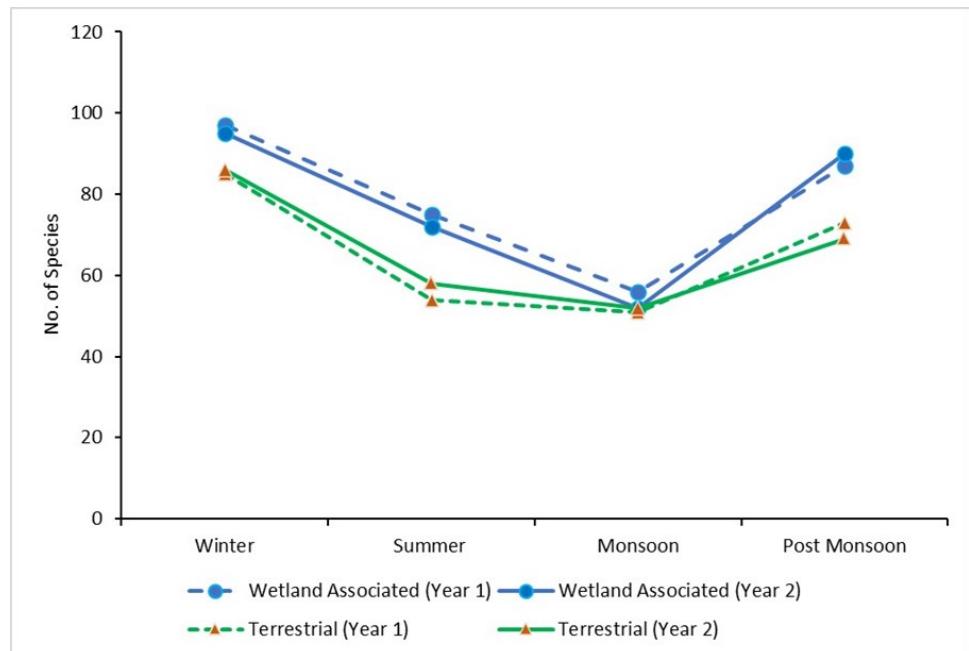


Figure 4. Seasonal occurrence of wetland-associated and terrestrial avifauna at Kumbharwada wetland, India.

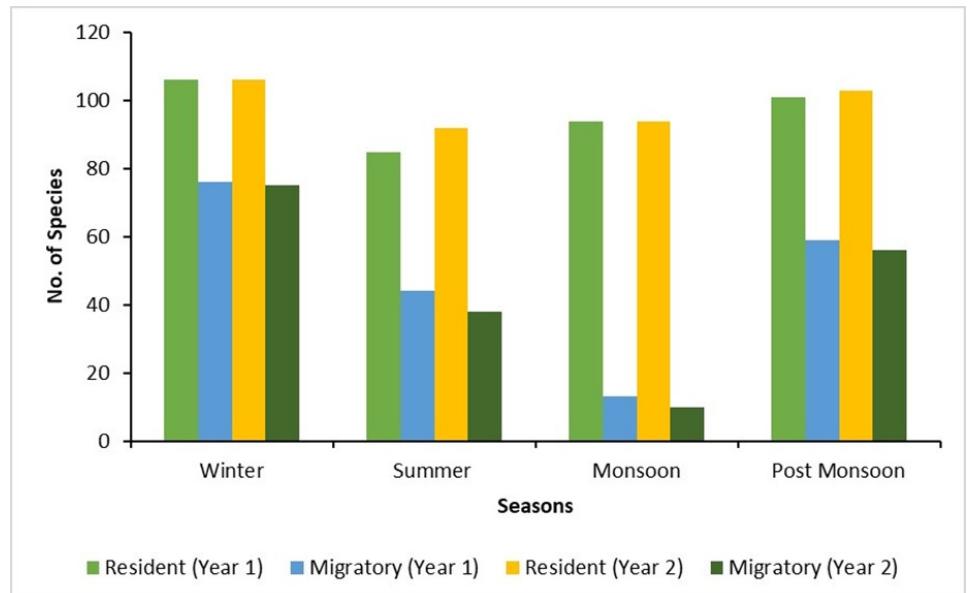


Figure 5. Seasonal Species Richness of Resident and Migratory avifauna at Kumbharwada wetland, India.

Conservation Status

Occurrence of birds showed that 60 species were common (29.41%), 54 species were uncommon (26.47%), 53 species were occasional (25.98%) and 37 species were rare (18.14%) at Kumbharwada wetland (Appendix 1). Among the bird species recorded during the study period, Common Pochard (*Aythya ferina*), River Tern (*Sterna aurantia*), Greater spotted Eagle (*Clanga clanga*), and Eastern Imperial Eagle (*Aquila heliaca*) are vulnerable under category of the IUCN Red List of Threatened Species. Ad-

ditionally, Steppe Eagle (*Aquila nipalensis*), falls under the Endangered category, while 12 species fall under the Near Threatened category (viz. Lesser Flamingo *Phoeniconaias minor*, Great Thick-knee *Esacus recurvirostris*, Eurasian Curlew *Numenius arquata*, Black-tailed Godwit *Limosa limosa*, Curlew Sandpiper *Calidris ferruginea*, Painted Stork *Mycteria leucocephala*, Oriental Darter *Anhinga melanogaster*, Dalmatian Pelican *Pelecanus crispus*, Black-headed Ibis *Threskiornis melanocephalus*, Pallid Harrier *Circus macrourus*, Red-necked Falcon *Falco chicquera* and Alexandrine Parakeet *Psittacula eupatria*) (IUCN 2023). When comparing the occurrence of these avian species with its global population trend, a noteworthy finding emerged that certain species with the declining population trend globally, were frequently encountered during the study period at Kumbharwada wetland (Figure 6). The study area holds multiple species having been globally threatened, which serve as one of the qualifying criteria (A1) as Important Bird Area (IBA).

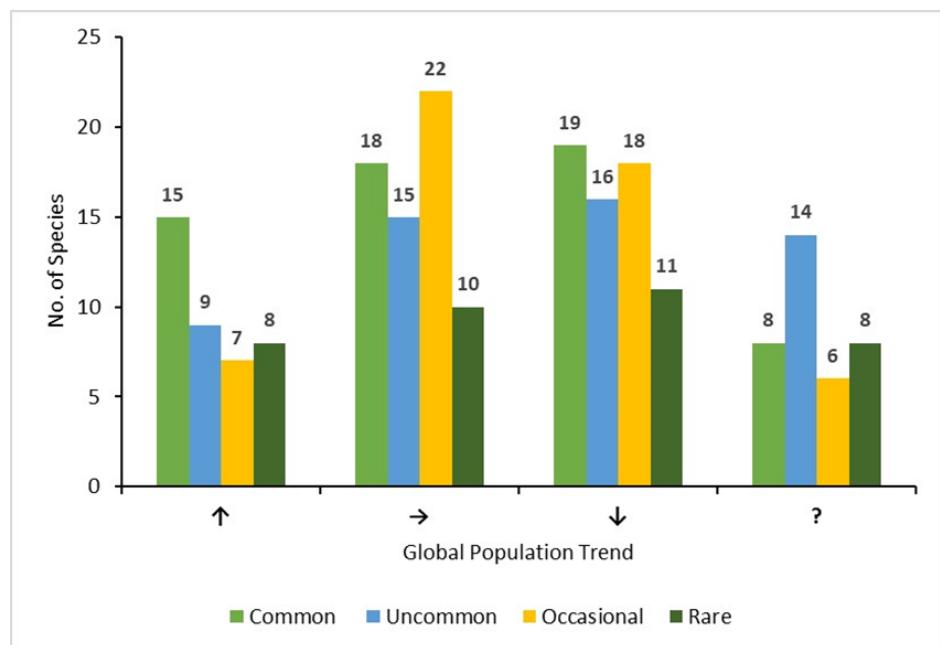


Figure 6. Comparision of occurrence of avifauna at Kumbharwada wetland with its global population trend ↑ Increasing, → Stable, ↓ Decreasing, ? Unknown

As per the State of India's Birds (SoIB 2020), 7 species (viz. Cotton Pygmy Goose *Nettapus coromandelianus*, Common Greenshank *Tringa nebularia*, Gull-billed Tern *Gelochelidon nilotica*, Pacific Golden Plover *Pluvialis fulva*, Short-toed Snake Eagle *Circaetus gallicus*, Red-necked Falcon *Falco chicquera*, and Steppe Eagle *Aquila nipalensis*) found during the study period are under the High Conservation Concern category for the country and 4 species recorded (viz. Gull-billed Tern *Gelochelidon nilotica*, Eastern Imperial Eagle *Aquila heliaca*, Greater-spotted Eagle *Clanga clanga*, and Common Pochard *Aythya ferina*) are listed as a key species for the Gujarat state. Many globally threatened species such as Lesser Flamingo *Phoeniconaias minor*, Black-headed Ibis *Threskiornis melanocephalus*, River Tern *Sterna aurantia*, Painted Stork *Mycteria leucocephala* with declining population trend are commonly found at Kumbharwada wetland, which indicate that the favourable resources were available for these species during the study period.

Two vagrant species (viz. Greater White-fronted Goose *Anser albifrons*, and Long-billed Dowitcher *Limnodromus scolopaceus*) were observed during the study period, which were very rare for the region. Grazing species such as Ruddy Shelduck *Tadorna ferruginea*, Bar-headed Goose

Anser indicus, and Greylag Goose *Anser anser* were found in high numbers during the study period indicating the availability of favourable resources during their wintering period at the Kumbharwada wetland. The study area serves as a critical foraging habitat for Greater Flamingo *Phoenicopterus roseus* and Lesser Flamingo *Phoeniconaias minor* throughout the year and they are found in large numbers (Tere & Parasharya 2011). Therefore, from the conservation perspective of such globally threatened species, it is required to prioritise the regular monitoring and long-term population studies of these species along with other threatened taxa inhabiting the Kumbharwada wetland. The study area holds multiple species which are globally threatened and serve the qualifying criterion as an Important Bird Area (IBA).

Threats

During the study period, it has been observed that the habitat is facing many threats (Figure 7). Anthropogenic pressure leads to the deterioration of water quality. Many parts of the wetland have been facing encroachment issue and remaining areas are also under severe threats such as pollution and habitat degradation. The growth and expansion of invasive *P. juliflora* in the habitat is also a concerning factor due to its adverse effects on the native vegetation. Untreated water, solid waste and chemical effluents are discharged in the wetland area which is one of the major factors contributing to the water pollution in this wetland. Extensive network of saltpans may alter the water quality and salinity levels. Polluted water can be toxic to birds, affecting their health and potentially leading to reduced reproductive capacities and survival rates (Richard et al. 2021; Makwana et al. 2023). The presence of polluted water and excessive growth of exotic vegetation can adversely impact the bird com-



Figure 7. Different types of threats to the avifauna and the Kumbharwada wetland.

munity of this Important Bird Area site. The high-voltage power lines passing over the wetland area is a severe threat to the large-sized birds residing in the habitat. The frequent cases of collision and mortality of birds especially both the species of flamingos have been reported during the study period and documented previously as well (Gadhvi 2011; Tere & Parasharya 2011; Parekh & Gadhvi 2013). Free-ranging dogs and cattle are also a significant factor for disturbance to the residential as well as migratory species residing in this wetland. Therefore, it is very important to mitigate the impacts of these anthropogenic threats and to maintain the healthy ecosystem in the region.

CONCLUSION

The present study recorded 204 species of birds belonging to 20 orders and 56 families from the Kumbharwada wetland, which is approximately one-third (33.33%) avian diversity of the entire Gujarat state. High species richness of avifauna at Kumbharwada wetland warrants for long-term population studies to understand the possible impacts of threats. Apart from that, more detailed research on the resource utilization by birds in Kumbharwada wetland are necessary to understand the significance of this Important Bird Area site. Maintaining the ecological integrity and conserving avian diversity at the Kumbharwada requires reduction in contamination of water, controlling invasive plants and weeds, preventing habitat destruction, minimizing bird-powerline collisions, and managing proper water levels. These crucial measures will ensure a healthy ecosystem for various bird species and sustain the overall biodiversity of the area. Local awareness and community participation can also play a vital role in conservation of this habitat. These combinations of efforts are imperative to foster the overall biodiversity of the entire region.

AUTHOR'S CONTRIBUTION

P.P.D. designed and supervised the study, V.M.M., A.G.M. and P.A.K. collected the data and verified the identification of species. VMM wrote the manuscript, P.P.D., P.A.K. and A.G.M. proofread, reviewed, and revised the final manuscript.

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CONFLICT OF INTEREST

The author confirms that there are no known conflicts of interest regarding this publication.

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APPENDICES**Appendix 1.** Checklist of Avifaunal diversity at Kumbharwada wetland, Bhavnagar, Gujarat, India

Sr. No.	Family	English Name	Scientific Name	Habitat	Residential Status	Occurrence	Global Trend	IUCN Status
Order: Anseriformes								
1	Anatidae	Lesser Whistling Duck	<i>Dendrocygna javanica</i> (Horsfield, 1821)	WA	Re	C	→	LC
2	Anatidae	Bar-headed Goose	<i>Anser indicus</i> (Latham, 1790)	WA	M	U	→	LC
3	Anatidae	Greylag Goose	<i>Anser anser</i> (Linnaeus, 1758)	WA	M	U	↑	LC
4	Anatidae	Greater White-fronted Goose	<i>Anser albifrons</i> (Scopoli, 1769)	WA	M	R	?	LC
5	Anatidae	Knob-billed Duck	<i>Sarcidiornis melanotos</i> (Pennant, 1769)	WA	Re	C	↓	LC
6	Anatidae	Ruddy Shelduck	<i>Tadorna ferruginea</i> (Pallas, 1764)	WA	M	U	?	LC
7	Anatidae	Cotton Pygmy Goose	<i>Nettapus coromandelianus</i> (J.F. Gmelin, 1789)	VA	Re	U	→	LC
8	Anatidae	Garganey	<i>Spatula querquedula</i> (Linnaeus, 1758)	WA	M	U	→	LC
9	Anatidae	Northern Shoveler	<i>Spatula clypeata</i> (Linnaeus, 1758)	WA	M	U	→	LC
10	Anatidae	Gadwall	<i>Mareca strepera</i> (Linnaeus, 1758)	VA	M	U	↑	LC
11	Anatidae	Eurasian Wigeon	<i>Mareca penelope</i> (Linnaeus, 1758)	WA	M	U	→	LC
12	Anatidae	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i> (J.R. Forster, 1781)	WA	Re	C	→	LC
13	Anatidae	Mallard	<i>Anas platyrhynchos</i> (Linnaeus, 1758)	VA	M	R	↑	LC
14	Anatidae	Northern Pintail	<i>Anas acuta</i> (Linnaeus, 1758)	WA	M	U	→	LC
15	Anatidae	Common Teal	<i>Anas crecca</i> (Linnaeus, 1758)	WA	M	U	?	LC
16	Anatidae	Common Pochard	<i>Aythya ferina</i> (Linnaeus, 1758)	VA	M	U	↓	VU
Order: Galliformes								
17	Phasianidae	Indian Peafowl	<i>Pavo cristatus</i> (Linnaeus, 1758)	TR	Re	O	→	LC
18	Phasianidae	Rain Quail	<i>Coturnix coromandelica</i> (J.F. Gmelin, 1789)	TR	M	O	→	LC
19	Phasianidae	Painted Francolin	<i>Francolinus pictus</i> (Jardine & Selby, 1828)	TR	Re	R	↓	LC
20	Phasianidae	Grey Francolin	<i>Ortygornis pondicerianus</i> (J.F. Gmelin, 1789)	TR	Re	C	→	LC
Order: Phoenicopteriformes								
21	Phoenicopteridae	Greater Flamingo	<i>Phoenicopterus roseus</i> (Pallas, 1811)	WA	Re	C	↑	LC
22	Phoenicopteridae	Lesser Flamingo	<i>Phoeniconaias minor</i> (E. Geoffroy Saint-Hilaire, 1798)	WA	Re	C	↓	NT
Order: Podicipediformes								
23	Podicipedidae	Little Grebe	<i>Tachybaptus ruficollis</i> (Pallas, 1764)	VA	Re	C	↓	LC
24	Podicipedidae	Black-necked Grebe	<i>Podiceps nigricollis</i> (C.L. Brehm, 1831)	WA	M	R	?	LC
Order: Columbiformes								
25	Columbidae	Rock Pigeon	<i>Columba livia</i> (J.F. Gmelin, 1789)	TR	Re	C	↓	LC

Appendix 1. Contd.

Sr. No.	Family	English Name	Scientific Name	Habitat	Residential Status	Occurrence	Global Trend	IUCN Status
26	Columbidae	Eurasian Collared Dove	<i>Streptopelia decaocto</i> (Frivaldszky, 1838)	TR	Re	C	↑	LC
27	Columbidae	Red Collared Dove	<i>Streptopelia tranquebarica</i> (Hermann, 1804)	TR	Re	O	↓	LC
28	Columbidae	Laughing Dove	<i>Streptopelia senegalensis</i> (Linnaeus, 1766)	TR	Re	C	→	LC
29	Columbidae	Yellow-footed Green Pigeon	<i>Trogon phoenicurus</i> (Latham, 1790)	TR	Re	R	↑	LC
Order: Cuculiformes								
30	Cuculidae	Greater Coucal	<i>Centropus sinensis</i> (Stephens, 1815)	TR	Re	C	→	LC
31	Cuculidae	Pied Cuckoo	<i>Clamator jacobinus</i> (Boddart, 1783)	TR	M	O	→	LC
32	Cuculidae	Asian Koel	<i>Eudynamys scolopaceus</i> (Linnaeus, 1758)	TR	Re	C	→	LC
33	Cuculidae	Common Hawk Cuckoo	<i>Hierococcyx varius</i> (Vahl, 1797)	TR	Re	U	→	LC
Order: Caprimulgiformes								
34	Caprimulgidae	Indian Nightjar	<i>Caprimulgus asiaticus</i> (Latham, 1790)	TR	Re	U	→	LC
35	Apodidae	Indian House Swift	<i>Apus affinis</i> (J.F. Gmelin, 1830)	TR	Re	C	↑	LC
Order: Gruiiformes								
36	Rallidae	Common Moorhen	<i>Gallinula chloropus</i> (Linnaeus, 1758)	WA	Re	C	→	LC
37	Rallidae	Eurasian Coot	<i>Fulica atra</i> (Linnaeus, 1758)	WA	Re	C	↑	LC
38	Rallidae	Grey-headed Swamphen	<i>Porphyrio poliocephalus</i> (Latham, 1801)	WA	Re	C	?	LC
39	Rallidae	Watercock	<i>Gallirex cinerea</i> (J.F. Gmelin, 1789)	WA	M	O	↓	LC
40	Rallidae	White-breasted Waterhen	<i>Amaurornis phoenicurus</i> (Pennant, 1769)	WA	Re	C	?	LC
41	Rallidae	Ruddy-breasted Crake	<i>Zapornia fusca</i> (Linnaeus, 1766)	WA	Re	R	↓	LC
42	Rallidae	Baillon's Crake	<i>Zapornia pusilla</i> (Pallas, 1776)	WA	M	R	?	LC
43	Gruidae	Demoiselle Crane	<i>Grus virgo</i> (Linnaeus, 1758)	WA	M	U	↑	LC
44	Gruidae	Common Crane	<i>Grus grus</i> (Linnaeus, 1758)	WA	M	O	↑	LC
Order: Charadriiformes								
45	Burhinidae	Indian Thick-knee	<i>Burhinus indicus</i> (Salvadori, 1867)	TR	Re	O	↓	LC
46	Burhinidae	Great Thick-knee	<i>Esacus recurvirostris</i> (Cavier, 1829)	TR	Re	R	↓	NT
47	Recurvirostridae	Black-winged Stilt	<i>Himantopus himantopus</i> (Linnaeus, 1758)	WA	Re	C	↑	LC
48	Recurvirostridae	Pied Avocet	<i>Recurvirostra avosetta</i> (Linnaeus, 1758)	WA	M	U	?	LC
49	Charadriidae	Pacific Golden Plover	<i>Pluvialis fulva</i> (J.F. Gmelin, 1789)	WA	M	O	↓	LC
50	Charadriidae	Yellow-wattled Lapwing	<i>Panellus malabaricus</i> (Boddart, 1783)	WA	Re	R	→	LC
51	Charadriidae	Red-wattled Lapwing	<i>Panellus indicus</i> (Boddart, 1783)	WA	Re	C	?	LC
52	Charadriidae	White-tailed Lapwing	<i>Vanellus leucurus</i> (M.H.C. Lichtenstein, 1823)	WA	M	O	?	LC
53	Charadriidae	Kentish Plover	<i>Charadrius alexandrinus</i> (Linnaeus, 1758)	WA	Re	C	↓	LC
54	Charadriidae	Lesser Sand Plover	<i>Charadrius mongolus</i> (Pallas, 1776)	WA	M	R	?	LC
55	Charadriidae	Little Ringed Plover	<i>Charadrius dubius</i> (Scopoli, 1786)	WA	Re	C	→	LC

Appendix 1. Contd.

Sr. No.	Family	English Name	Scientific Name	Habitat	Residential Status	Occurrence	Global Trend	IUCN Status
56	Rostratulidae	Greater Painted-snipe	<i>Rostratula benghalensis (Linnaeus, 1758)</i>	WA	Re	R	↓	LC
57	Jacanidae	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus (Scopoli, 1786)</i>	WA	Re	C	↓	LC
58	Scolopacidae	Eurasian Curlew	<i>Numerius arquata (Linnaeus, 1758)</i>	WA	M	R	→	NT
59	Scolopacidae	Black-tailed Godwit	<i>Limosa limosa (Linnaeus, 1758)</i>	WA	M	U	→	NT
60	Scolopacidae	Ruff	<i>Calidris pugnax (Linnaeus, 1758)</i>	WA	M	C	↓	LC
61	Scolopacidae	Curlew Sandpiper	<i>Calidris ferruginea (Pontoppidan, 1763)</i>	WA	M	O	→	NT
62	Scolopacidae	Temminck's Stint	<i>Calidris temminchii (Leisler, 1812)</i>	WA	M	U	?	LC
63	Scolopacidae	Little Stint	<i>Calidris minuta (Leisler, 1812)</i>	WA	M	C	↑	LC
64	Scolopacidae	Long-billed Dowitcher	<i>Limnodromus scolopaceus (Say, 1822)</i>	WA	M	R	?	LC
65	Scolopacidae	Common Snipe	<i>Gallinago gallinago (Linnaeus, 1758)</i>	WA	M	U	LC	LC
66	Scolopacidae	Common Sandpiper	<i>Actitis hypoleucos (Linnaeus, 1758)</i>	WA	M	C	LC	LC
67	Scolopacidae	Green Sandpiper	<i>Tringa ochropus (Linnaeus, 1758)</i>	WA	M	U	LC	LC
68	Scolopacidae	Spotted Redshank	<i>Tringa erythropus (Pallas, 1764)</i>	WA	M	O	→	LC
69	Scolopacidae	Common Greenshank	<i>Tringa nebularia (Gunnerus, 1767)</i>	WA	M	O	→	LC
70	Scolopacidae	Marsh Sandpiper	<i>Tringa stagnatilis (Bechstein, 1809)</i>	WA	M	U	↓	LC
71	Scolopacidae	Wood Sandpiper	<i>Tringa glareola (Linnaeus, 1758)</i>	WA	M	C	→	LC
72	Scolopacidae	Common Redshank	<i>Tringa totanus (Linnaeus, 1758)</i>	WA	M	U	?	LC
73	Turnicidae	Yellow-legged Buttonquail	<i>Turix tanki (Blyth, 1843)</i>	TR	M	R	→	LC
74	Turnicidae	Barred Buttonquail	<i>Turix suscitator (J.F. Gmelin, 1789)</i>	TR	Re	R	↓	LC
75	Glareolidae	Collared Pratincole	<i>Glareola pratincola (Linnaeus, 1766)</i>	WA	Re	O	↓	LC
76	Glareolidae	Small Pratincole	<i>Glareola lactea (Temminck, 1820)</i>	WA	Re	O	?	LC
77	Laridae	Slender-billed Gull	<i>Chroicocephalus genei (Breme, 1839)</i>	WA	M	O	?	LC
78	Laridae	Black-headed Gull	<i>Chroicocephalus ridibundus (Linnaeus, 1766)</i>	WA	M	O	?	LC
79	Laridae	Brown-headed Gull	<i>Chroicocephalus brunnicephalus (Jerdon, 1840)</i>	WA	M	O	→	LC
80	Laridae	Pallas's Gull	<i>Ichthyaetus ichthyaetus (Pallas, 1773)</i>	WA	M	R	↓	LC
81	Laridae	Lesser Black-backed Gull	<i>Larus fuscus (Linnaeus, 1758)</i>	WA	M	R	↑	LC
82	Laridae	Little Tern	<i>Sternula albifrons (Pallas, 1764)</i>	WA	Re	O	↓	LC
83	Laridae	Gull-billed Tern	<i>Gelochelidon nilotica (J.F. Gmelin, 1789)</i>	WA	M	U	LC	LC
84	Laridae	Caspian Tern	<i>Hydroprogne caspia (Pallas, 1770)</i>	WA	Re	C	LC	LC
85	Laridae	Whiskered Tern	<i>Chlidonias hybrida (Pallas, 1811)</i>	WA	M	C	→	LC
86	Laridae	Common Tern	<i>Sterna hirundo (Linnaeus, 1758)</i>	WA	M	R	?	LC
87	Laridae	River Tern	<i>Sterna aurantia (J.E. Gray, 1831)</i>	WA	Re	C	↓	VU

Order: Ciconiiformes

Appendix 1. Contd.

Sr. No.	Family	English Name	Scientific Name	Habitat	Residential Status	Occurrence	Global Trend	IUCN Status
88	Ciconiidae	Asian Openbill	<i>Anastomus oscitans</i> (<i>Boddart</i> , 1783)	WA	Re	O	?	LC
89	Ciconiidae	Painted Stork	<i>Mycteria leucocephala</i> (<i>Pennant</i> , 1769)	WA	Re	C	↓	NT
Order: Suliformes								
90	Anhingidae	Oriental Darter	<i>Anhinga melanogaster</i> (<i>Pennant</i> , 1769)	WA	Re	O	↓	NT
91	Phalacrocoracidae	Little Cormorant	<i>Microcarbo niger</i> (<i>Vieillot</i> , 1817)	WA	Re	U	?	LC
92	Phalacrocoracidae	Great Cormorant	<i>Phalacrocorax carbo</i> (<i>Linnaeus</i> , 1758)	WA	Re	O	↑	LC
93	Phalacrocoracidae	Indian Cormorant	<i>Phalacrocorax fuscicollis</i> (<i>Stephens</i> , 1826)	WA	Re	U	?	LC
Order: Pelecaniformes								
94	Pelecanidae	Great White Pelican	<i>Pelecanus onocrotalus</i> (<i>Linnaeus</i> , 1758)	WA	M	U	?	LC
95	Pelecanidae	Dalmatian Pelican	<i>Pelecanus crispus</i> (<i>Bruch</i> , 1832)	WA	M	O	↓	NT
96	Ardeidae	Yellow Bittern	<i>Ixobrychus sinensis</i> (<i>J.F. Gmelin</i> , 1789)	WA	Re	R	?	LC
97	Ardeidae	Grey Heron	<i>Ardea cinerea</i> (<i>Linnaeus</i> , 1758)	WA	Re	U	?	LC
98	Ardeidae	Purple Heron	<i>Ardea purpurea</i> (<i>Linnaeus</i> , 1766)	WA	Re	C	↓	LC
99	Ardeidae	Great Egret	<i>Ardea alba</i> (<i>Linnaeus</i> , 1758)	WA	Re	U	?	LC
100	Ardeidae	Intermediate Egret	<i>Ardea intermedia</i> (<i>Wagler</i> , 1829)	WA	Re	C	↓	LC
101	Ardeidae	Little Egret	<i>Egretta garzetta</i> (<i>Linnaeus</i> , 1766)	WA	Re	C	↑	LC
102	Ardeidae	Western Reef Egret	<i>Egretta gularis</i> (<i>Bosc</i> , 1792)	WA	Re	U	→	LC
103	Ardeidae	Cattle Egret	<i>Bubulcus ibis</i> (<i>Linnaeus</i> , 1758)	WA	Re	C	↑	LC
104	Ardeidae	Indian Pond Heron	<i>Ardola grayii</i> (<i>Sykes</i> , 1832)	WA	Re	C	?	LC
105	Ardeidae	Striated Heron	<i>Butorides striata</i> (<i>Linnaeus</i> , 1758)	WA	Re	R	→	LC
106	Ardeidae	Black-crowned Night Heron	<i>Nycticorax nycticorax</i> (<i>Linnaeus</i> , 1758)	WA	Re	U	→	LC
107	Threskiornithidae	Glossy Ibis	<i>Plegadis falcinellus</i> (<i>Linnaeus</i> , 1766)	WA	Re	C	LC	LC
108	Threskiornithidae	Black-headed Ibis	<i>Threskiornis melanocephalus</i> (<i>Latham</i> , 1790)	WA	Re	C	NT	NT
109	Threskiornithidae	Red-naped Ibis	<i>Pseudibis papillosa</i> (<i>Temminck</i> , 1824)	WA	Re	C	↓	LC
110	Threskiornithidae	Eurasian Spoonbill	<i>Platalea leucorodia</i> (<i>Linnaeus</i> , 1758)	WA	Re	C	?	LC
Order: Accipitriformes								
111	Pandionidae	Osprey	<i>Pandion haliaetus</i> (<i>Linnaeus</i> , 1758)	WA	M	O	↑	LC
112	Accipitridae	Black-winged Kite	<i>Elanus caeruleus</i> (<i>Desfontaines</i> , 1789)	TR	Re	U	→	LC
113	Accipitridae	Oriental Honey Buzzard	<i>Pernis philorhynchus</i> (<i>Temminck</i> , 1821)	TR	Re	O	↓	LC
114	Accipitridae	Short-toed Snake Eagle	<i>Circus gallicus</i> (<i>J.F. Gmelin</i> , 1788)	TR	Re	O	→	LC
115	Accipitridae	Greater Spotted Eagle	<i>Clanga clanga</i> (<i>Pallas</i> , 1811)	TR	M	O	→	VU
116	Accipitridae	Booted Eagle	<i>Hieraaetus pennatus</i> (<i>J.F. Gmelin</i> , 1788)	TR	M	O	→	LC
117	Accipitridae	Steppe Eagle	<i>Aquila nipalensis</i> (<i>Hodgson</i> , 1833)	TR	M	O	→	EN
118	Accipitridae	Eastern Imperial Eagle	<i>Aquila heliaca</i> (<i>Savigny</i> , 1809)	TR	M	O	→	VU
119	Accipitridae	Western Marsh Harrier	<i>Circus aeruginosus</i> (<i>Linnaeus</i> , 1758)	WA	M	U	→	LC
120	Accipitridae	Pallid Harrier	<i>Circus macrourus</i> (<i>S.G. Gmelin</i> , 1770)	TR	M	R	→	NT
121	Accipitridae	Montagu's Harrier	<i>Circus pygargus</i> (<i>Linnaeus</i> , 1758)	TR	M	O	→	LC

Appendix 1. Contd.

Sr. No.	Family	English Name	Scientific Name	Habitat	Residential Status	Occurrence	Global Trend	IUCN Status
122	Accipitridae	Shikra	<i>Accipiter badius</i> (J.F. Gmelin, 1788)	TR	Re	U	→	LC
123	Accipitridae	Black Kite	<i>Milvus migrans</i> (Boddart, 1783)	TR	Re	O	→	LC
Order: Strigiformes								
124	Tytonidae	Common Barn Owl	<i>Tyto alba</i> (Scopoli, 1769)	TR	Re	R	→	LC
125	Strigidae	Spotted Owlet	<i>Athene brama</i> (Temminck, 1821)	TR	Re	C	→	LC
Order: Coraciiformes								
126	Alcedinidae	Common Kingfisher	<i>Alcedo atthis</i> (Linnaeus, 1758)	WA	Re	C	?	LC
127	Alcedinidae	White-throated Kingfisher	<i>Halcyon smyrnensis</i> (Linnaeus, 1758)	WA	Re	C	↑	LC
128	Alcedinidae	Pied Kingfisher	<i>Ceryle rudis</i> (Linnaeus, 1758)	WA	Re	U	?	LC
129	Meropidae	Green Bee-eater	<i>Merops orientalis</i> (Latham, 1801)	TR	Re	C	↑	LC
130	Meropidae	Blue-cheeked Bee-eater	<i>Merops persicus</i> (Pallas, 1773)	TR	M	R	→	LC
131	Meropidae	Blue-tailed Bee-eater	<i>Merops philippinus</i> (Linnaeus, 1767)	TR	Re	R	→	LC
132	Coraciidae	European Roller	<i>Coracias garrulus</i> (Linnaeus, 1758)	TR	M	R	↓	LC
133	Coraciidae	Indian Roller	<i>Coracias benghalensis</i> (Linnaeus, 1758)	TR	Re	O	↑	LC
Order: Piciformes								
134	Megalaenidae	Coppersmith Barbet	<i>Psilopogon haemacephalus</i> (Statius Muller, 1776)	TR	Re	U	↑	LC
135	Picidae	Eurasian Wryneck	<i>Jynx torquilla</i> (Linnaeus, 1758)	TR	M	R	↓	LC
Order: Falconiformes								
136	Falconidae	Common Kestrel	<i>Falco tinnunculus</i> (Linnaeus, 1758)	TR	M	O	↓	LC
137	Falconidae	Red-necked Falcon	<i>Falco chicquera</i> (Daudin, 1800)	TR	Re	O	↓	NT
138	Falconidae	Peregrine Falcon	<i>Falco peregrinus</i> ('Tunstall, 1771)	TR	M	O	↑	LC
Order: Psittaciformes								
139	Psittaculidae	Alexandrine Parakeet	<i>Psittacula eupatria</i> (Linnaeus, 1766)	TR	Re	O	↓	NT
140	Psittaculidae	Rose-ringed Parakeet	<i>Psittacula krameri</i> (Scopoli, 1769)	TR	Re	C	↑	LC
Order: Passeriformes								
141	Dicruridae	Black Drongo	<i>Dicrurus macrocercus</i> (Vieillot, 1817)	TR	Re	C	?	LC
142	Laniidae	Isabelline Shrike	<i>Lanius isabellinus</i> (Hemprich & Ehrenberg, 1833)	TR	M	O	→	LC
143	Laniidae	Long-tailed Shrike	<i>Lanius schach</i> (Linnaeus, 1758)	TR	Re	C	?	LC
144	Laniidae	Bay-backed Shrike	<i>Lanius vittatus</i> (Valenciennes, 1826)	TR	Re	O	→	LC

Appendix 1. Contd.

Sr. No.	Family	English Name	Scientific Name	Habitat	Residential Status	Occurrence	Global Trend	IUCN Status
145	Corvidae	Rufous Treepie	<i>Dendrocitta vagabunda</i> (Latham, 1790)	TR	Re	U	→	LC
146	Corvidae	Large-billed Crow	<i>Corvus macrorhynchos</i> (Wagler, 1827)	TR	Re	C	→	LC
147	Corvidae	House Crow	<i>Corvus splendens</i> (Vieillot, 1817)	TR	Re	C	→	LC
148	Alaudidae	Rufous-tailed Lark	<i>Ammonastes phoenicura</i> (Franklin, 1831)	TR	Re	U	→	LC
149	Alaudidae	Ashy-crowned Sparrow Lark	<i>Eremopterix griseus</i> (Scopoli, 1786)	TR	Re	U	→	LC
150	Alaudidae	Sand Lark	<i>Alaudala raytal</i> (Blyth, 1845)	TR	Re	C	→	LC
151	Alaudidae	Crested Lark	<i>Galerida cristata</i> (Linnaeus, 1758)	TR	Re	C	↓	LC
152	Alaudidae	Sykes's Lark	<i>Galerida deva</i> (Sykes, 1832)	TR	Re	C	→	LC
153	Cisticolidae	Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant, 1769)	TR	Re	U	→	LC
154	Cisticolidae	Grey-breasted Prinia	<i>Prinia hodgsonii</i> (Blyth, 1844)	TR	Re	O	→	LC
155	Cisticolidae	Delicate Prinia	<i>Prinia lepida</i> (Blyth, 1844)	TR	Re	R	?	LC
156	Cisticolidae	Jungle Prinia	<i>Prinia sylvatica</i> (Jerdon, 1840)	TR	Re	R	↓	LC
157	Cisticolidae	Ashy Prinia	<i>Prinia socialis</i> (Sykes, 1832)	TR	Re	U	→	LC
158	Cisticolidae	Plain Prinia	<i>Prinia inornata</i> (Sykes, 1832)	TR	Re	C	↑	LC
159	Cisticolidae	Zitting Cisticola	<i>Cisticola juncidis</i> (Rafinesque, 1810)	WA	Re	U	→	LC
160	Acrocephalidae	Booted Warbler	<i>Iduna caligata</i> (M.H.C. Lichtenstein, 1823)	TR	M	O	↑	LC
161	Acrocephalidae	Sykes's Warbler	<i>Iduna rama</i> (Sykes, 1832)	TR	M	O	↑	LC
162	Acrocephalidae	Paddyfield Warbler	<i>Acrocephalus agricola</i> (Jerdon, 1845)	TR	M	R	↓	LC
163	Acrocephalidae	Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i> (Blyth, 1849)	WA	M	R	↑	LC
164	Acrocephalidae	Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i> (Hemprich & Ehrenberg, 1833)	WA	Re	U	→	LC
165	Hirundinidae	Sand Martin	<i>Riparia riparia</i> (Linnaeus, 1758)	WA	M	O	↑	LC
166	Hirundinidae	Dusky Crag Martin	<i>Phylomodiolus concolor</i> (Sykes, 1832)	TR	Re	U	↑	LC
167	Hirundinidae	Barn Swallow	<i>Hirundo rustica</i> (Linnaeus, 1758)	TR	M	U	↓	LC
168	Hirundinidae	Wire-tailed Swallow	<i>Hirundo smithii</i> (Leach, 1818)	TR	Re	U	↑	LC
169	Hirundinidae	Red-rumped Swallow	<i>Cecropis daurica</i> (Lazmann, 1769)	TR	Re	O	↑	LC
170	Hirundinidae	Streak-throated Swallow	<i>Petrochelidon fluvicola</i> (Blyth, 1855)	TR	Re	O	↑	LC
171	Pycnonotidae	Red-vented Bulbul	<i>Pytonotus cafer</i> (Linnaeus, 1766)	TR	Re	C	↑	LC
172	Pycnonotidae	White-eared Bulbul	<i>Pyeronotus leucotis</i> (Gould, 1836)	TR	Re	U	↓	LC
173	Phylloscopidae	Common Chiffchaff	<i>Phylloscopus collybita</i> (Vieillot, 1817)	TR	M	R	↑	LC
174	Sylviidae	Lesser Whitethroat	<i>Curruca curruca</i> (Linnaeus, 1758)	TR	M	R	↑	LC
175	Sylviidae	Eastern Orphean Warbler	<i>Curruca crassirostris</i> (Cretzschmar, 1830)	TR	M	R	↑	LC
176	Zosteropidae	Indian White-eye	<i>Zosterops palpebrosus</i> (Temminck, 1824)	TR	Re	C	→	LC
177	Leiothrichidae	Common Babbler	<i>Argya caudata</i> (Dumont, 1823)	TR	Re	C	→	LC
178	Leiothrichidae	Large Grey Babbler	<i>Argya malcolmi</i> (Sykes, 1832)	TR	Re	U	→	LC
179	Sturnidae	Rosy Starling	<i>Pastor roseus</i> (Linnaeus, 1758)	TR	M	U	?	LC
180	Sturnidae	Brahminy Starling	<i>Sturnia pagodarum</i> (J.F. Gmelin, 1789)	TR	Re	U	?	LC
181	Sturnidae	Common Myna	<i>Acridotheres tristis</i> (Linnaeus, 1766)	TR	Re	C	↑	LC

Appendix 1. Contd.

Sr. No.	Family	English Name	Scientific Name	Habitat	Residential Status	Occurrence	Global Trend	IUCN Status
182	Sturnidae	Bank Myna	<i>Aerodotheres ginginianus</i> (<i>Latham, 1790</i>)	WA	Re	C	↑	LC
183	Muscicapidae	Indian Robin	<i>Copsychus fulicatus</i> (<i>Linnaeus, 1766</i>)	TR	Re	C	→	LC
184	Muscicapidae	Oriental Magpie Robin	<i>Copsychus saularis</i> (<i>Linnaeus, 1758</i>)	TR	Re	U	→	LC
185	Muscicapidae	Bluetroat	<i>Luscinia svecica</i> (<i>Linnaeus, 1758</i>)	WA	M	O	→	LC
186	Muscicapidae	Black Redstart	<i>Phoenicurus ochruros</i> (<i>S.G. Gmelin, 1774</i>)	TR	M	R	↑	LC
187	Muscicapidae	Siberian Stonechat	<i>Saxicola maurus</i> (<i>Pallas, 1773</i>)	TR	M	U	?	LC
188	Muscicapidae	Pied Bushchat	<i>Saxicola caprata</i> (<i>Linnaeus, 1766</i>)	TR	Re	O	→	LC
189	Muscicapidae	Isabelline Wheatear	<i>Oenanthe isabellina</i> (<i>Tenminck, 1829</i>)	TR	M	O	→	LC
190	Muscicapidae	Desert Wheatear	<i>Oenanthe deserti</i> (<i>Tenminck, 1825</i>)	TR	M	O	→	LC
191	Nectariniidae	Purple Sunbird	<i>Cinnyris asiaticus</i> (<i>Latham, 1790</i>)	TR	Re	C	→	LC
192	Ploceidae	Baya Weaver	<i>Ploceus philippinus</i> (<i>Linnaeus, 1766</i>)	TR	Re	O	→	LC
193	Estrildidae	Indian Silverbill	<i>Eudice malabarica</i> (<i>Linnaeus, 1758</i>)	TR	Re	U	→	LC
194	Passeridae	House Sparrow	<i>Passer domesticus</i> (<i>Linnaeus, 1758</i>)	TR	Re	C	→	LC
195	Passeridae	Chestnut-shouldered Petronia	<i>Gymnoris xanthocollis</i> (<i>E. Burton, 1838</i>)	TR	Re	R	→	LC
196	Motacillidae	Grey Wagtail	<i>Motacilla cinerea</i> (<i>Tunstall, 1771</i>)	WA	M	O	→	LC
197	Motacillidae	Western Yellow Wagtail	<i>Motacilla flava</i> (<i>Linnaeus, 1758</i>)	WA	M	U	→	LC
198	Motacillidae	Citrine Wagtail	<i>Motacilla citreola</i> (<i>Pallas, 1776</i>)	WA	M	U	↑	LC
199	Motacillidae	White-browed Wagtail	<i>Motacilla maderaspatensis</i> (<i>J.F. Gmelin, 1789</i>)	WA	Re	R	→	LC
200	Motacillidae	White Wagtail	<i>Motacilla alba</i> (<i>Linnaeus, 1758</i>)	WA	M	O	→	LC
201	Motacillidae	Tawny Pipit	<i>Anthus campestris</i> (<i>Linnaeus, 1758</i>)	TR	M	O	→	LC
202	Motacillidae	Paddyfield Pipit	<i>Anthus rufulus</i> (<i>Vieillot, 1818</i>)	TR	Re	C	→	LC
203	Motacillidae	Long-billed Pipit	<i>Anthus similis</i> (<i>Jerdon, 1840</i>)	TR	M	R	→	LC
204	Upupidae	Eurasian Hoopoe	<i>Upupa epops</i> (<i>Linnaeus, 1758</i>)	TR	M	O	↓	LC

Order: Bucerotiformes

Note: ↑ Increasing, → Stable, ↓ Decreasing, ? Unknown; Re-Residential, M-Migratory; C-Common, U-Uncommon, O-Occasional, R-Rare; IUCN-International Union for Conservation of Nature and Natural Resources; EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern