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continued on the back inside cover

Cover: Whale Shark *Rhincodon typus* and Reef - made with poster colours. © P. Kritika.



A checklist of avifauna of Mangalore University, Karnataka, India

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Abstract: The study of the avifaunal diversity was carried out in the Mangalore University campus, located in Dakshina Kannada District, Karnataka from 2013 to 2021, in and around the campus. A total of 150 bird species belonging to 18 orders and 56 families were recorded during the study. Out of these, the study area supports five species which are endemic to the Western Ghats. The feeding guild analysis revealed that the insectivorous group had the highest number of species (53 species). The study provides baseline data for monitoring the avifauna in the campus and demonstrates the importance of the area in bird conservation.

Keywords: Birds, Dakshina Kannada, diversity, feeding guilds, Mangalagangothri campus, Mangaluru.

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Author contributions: KMR, KVK, VH, MCPK, and DN contribute and compiled the checklist. DN and KMR created the tables and figures. All authors contributed equally to the preparation of the manuscript.

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INTRODUCTION

Birds are one of the widely distributed vertebrates, showing maximum diversity. They play a key role in the ecosystem as environmental/biodiversity indicators. The diversity of birds, taxonomy and their distribution are well documented in India (Ali & Ripley 1987; Kazmierczak 2006; Grimmett et al. 2011). The global species accounts for a total of 10,721 species (Clements et al. 2019). India also has a rich avifaunal diversity with 1,340 species, which account for 12% of the world's total species (Praveen et al. 2021). Of these, 535 species of birds have been reported from Karnataka (Praveen et al. 2018).

Due to increased anthropogenic activities there is a continuous change in landscape (Jha et al. 2000; Purvis & Hector 2000), demanding the need for monitoring schemes to know the major flora and fauna at the global as well regional levels (Gadgil 1996). Bird studies help in understanding the importance of landscape in terms of their conservation. Continuous monitoring helps in understanding the habitat and distribution, which is crucial in planning effective conservation strategies (Paul & Cooper 2005).

There have been few ornithological studies carried out in Dakshina Kannada District, from coastal Karnataka (Shivashankar et al. 2011). Previously, (Ramitha & Vijayalaxmi 2001) reported 56 species of birds belonging to 31 families, however, in their study they covered University Campus along with some adjoining areas like Pavor, Assaigoli, Someshwara and Netravathi bridge. Except for this earlier report, no detailed long-term studies have been made on the diversity of birds in the study area. In this context, the present study was undertaken to highlight the status, composition, feeding guilds and diversity of birds of Mangalore University Campus, Dakshina Kannada, Karnataka.

MATERIALS AND METHODS

Study site

The study was conducted in the Mangalore University campus located between 12.818°N & 74.917°E and is situated 20 km away from Mangalore City, Dakshina Kannada District, Karnataka (Figure 1). The campus is spread over 333 acres of land and it consists of different

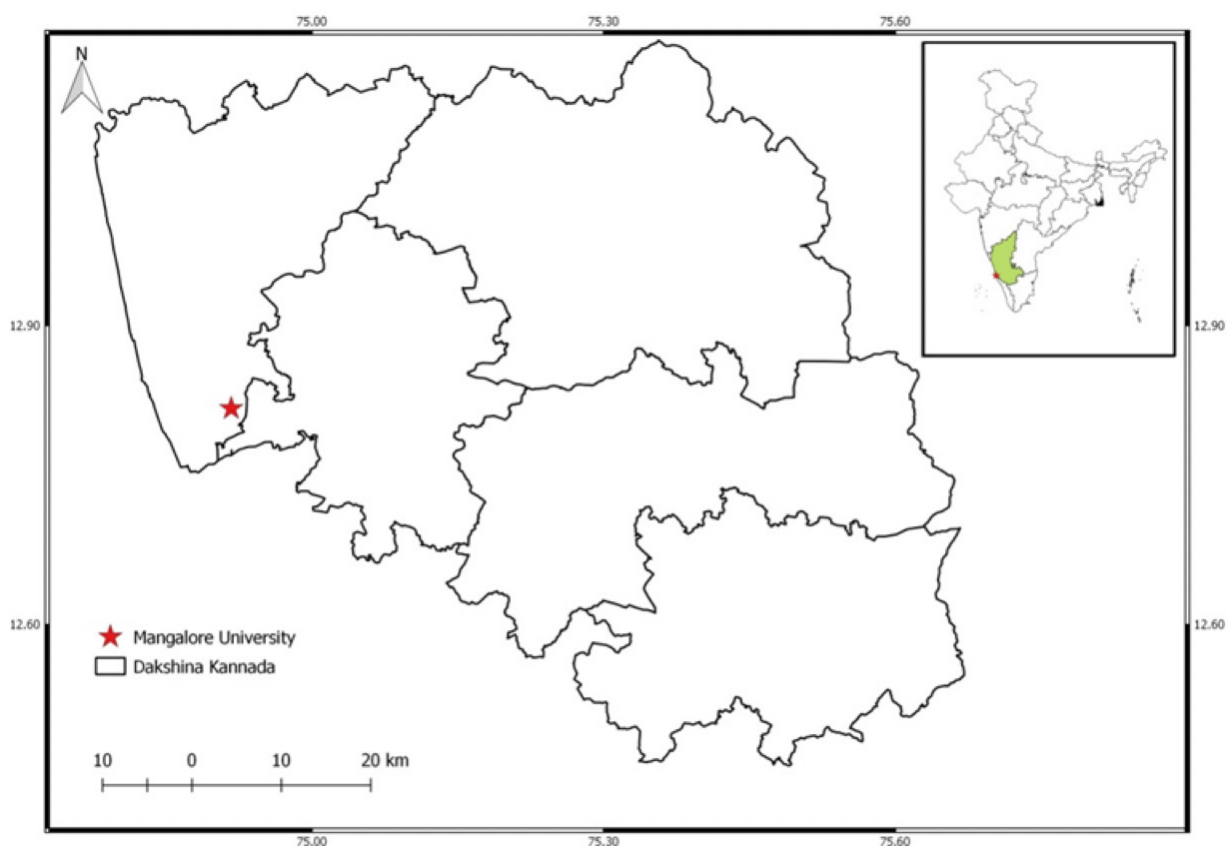


Figure 1. Location map of Mangalore University Campus.

habitat types such as laterite, shrubby patch and orchards. The overall habitat consists of open grassland and shrubs like *Aparosa* sp. (Phyllanthaceae), *Ixora* sp., *Mussaenda bellila* (Rubiaceae), *Premna serratifolia* (Lamiaceae) and trees like *Hopea ponga* (Dipterocarpaceae), *Mangifera indica*, *Holigarna ferruginea*, *Anacardia occidentale* (Anacardiaceae), *Peltophorum pterocarpum*, *Acacia auriculiformis*, *Accacia* spp, *Cassia fistula*, *Pongamia pinnata* (Fabaceae), *Terminalia* spp. (Combretaceae), *Artocarpus heterophyllus*, *Ficus* spp. (Moraceae), *Eucalyptus* sp. (Myrtaceae) and the orchard includes a few ornamental plant species. The study region receives an annual rainfall of 3479 mm and the average temperature ranges from 27°C to 32°C.

Bird survey method

The bird exploration was conducted for a period of nine years (2013–2021) to maintain the baseline data in the Mangalore University campus. The data was collected by opportunistic encounters during the regular field visits. Later, the bird survey was conducted using fixed 16 transects of 100 m length (each transect is 50 m away from the other) in different sites (Yashmita-Ulman & Singh 2021), during the month February 2016 to 2021 for four days between 0700 to 1000 h and 1600 to 1900 h. The species were recorded for 15 minutes by covering the transect length at a slow pace. The birds were recorded directly using a pair of field binoculars (Bushnell 8 x 42, Celestron outland 10 x 42) and a camera (Nikon D750, Nikkor 200-500mm f/5.6 lens). The identification of birds was done using the following field guides (Ali 2002; Grimmett et al. 2011). The common name, scientific name, IUCN Red List status, IOWA 1972,

CITES and migratory status is followed using (SolB 2020; Praveen et al. 2021) eBird database. To compile the list of birds we used secondary data cited in eBird data (accessed 20 February 2021). The feeding guild data for each species was collected from the existing literature (Ali & Ripley 1987; Vinayak & Mali 2018; Harisha et al. 2021; Norbu et al. 2021).

RESULT AND DISCUSSION

A total of 150 species of birds, belonging to 56 families under 18 orders were recorded from the study area (Table 1; Images 1–33). The order Passeriformes dominated the study area with a maximum number of species, i.e., 80 species (53%) and with the lowest Anseriformes, Bucerotiformes, Falconiformes, Suliformes, sharing one species (1%) each (Figure 2).

As per IUCN Red List (IUCN 2021), the campus supports, three Near Threatened (NT) species—*Ciconia episcopus*, *Threskiornis melanocephalus*, and *Brachypodius priocephalus*—and the remaining 146 species are under Least Concern (LC). The campus also supports five species namely, *Brachypodius priocephalus*, *Rubigula gularis*, *Argya subrufa*, *Sturnia blythii*, and *Dicaeum concolor* which are endemic to the Western Ghats (Table 1).

An analysis of the feeding guilds of these birds revealed that, 35% (53 species) were insectivorous, 28% (42 species) were omnivorous, 23% (34 species) were carnivorous, 6% (9 species) were granivorous, 4% (four species each) were frugivorous and nectivorous respectively (Figure 3).

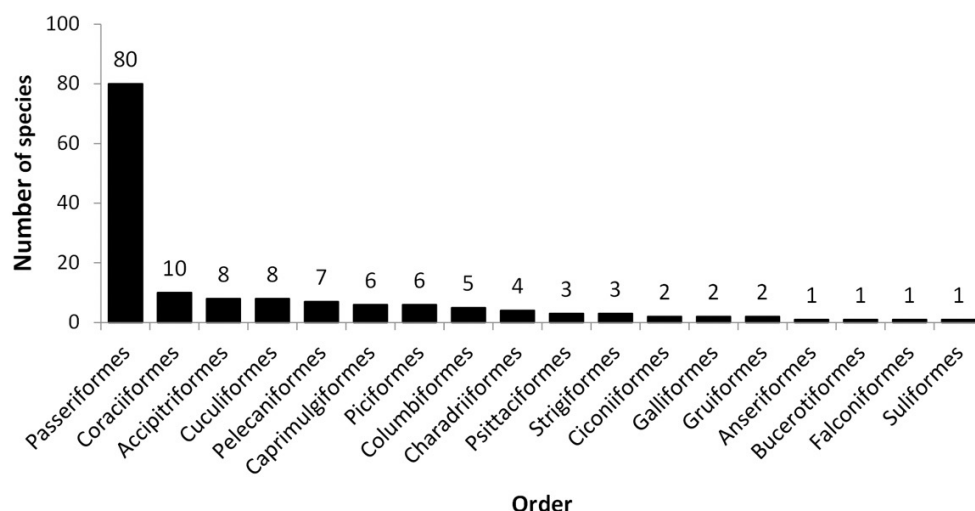


Figure 2. Order-wise species distribution and diversity of birds at Mangalore University campus.

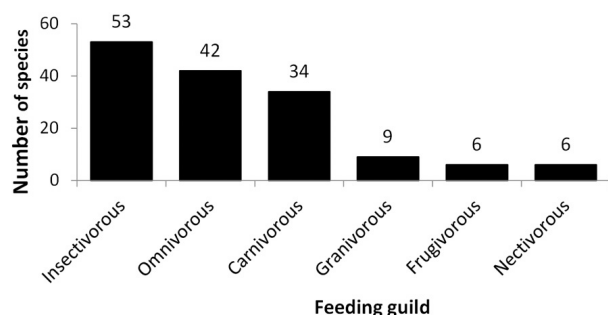


Figure 3. Feeding guilds of birds at Mangalore University campus.

During the study period 124 bird species were reported as residential (R), followed by 13 species long distance migratory (LD) and 13 species local migratory (LM).

Karnataka is home to 535 bird species (Praveen et al. 2018) and we recorded 150 (28%) species during the current study at Mangalore University Campus. Several other bird studies were conducted in different University campuses of Karnataka (Nazneen et al. 2001; Rajashekara & Venkatesh 2016, 2017; Harisha et al. 2021). Since there is a limitation in observation, the long-term monitoring of these species is essential (Schlegel & Rupf 2010). Our study provides important baseline information and the importance of species presence; this will help in the long term monitoring of birds in the campus besides acting as an essential document in planning conservation efforts in the campus.

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Table 1. Checklist of bird diversity of the Mangalore University campus along with legal status and migratory status.

	Species name	IUCN Red List 2021	IWPA 1972	CITES Appendix	Feeding guild	Migratory status
	Order Anseriformes, Family Anatidae					
1	<i>Dendrocygna javanica</i> (Horsfield, 1821); Lesser Whistling Duck	LC	IV		O	R
	Order Galliformes, Family Phasianidae					
2	<i>Pavo cristatus</i> Linnaeus, 1758; Indian Peafowl	LC	I		O	R
3	<i>Gallus domesticus</i> (J.F. Gmelin, 1789); Red Spurfowl	LC	IV		G	R
	Order Columbiformes, Family Columbidae					
4	<i>Columba livia</i> J.F. Gmelin, 1789; Rock Pigeon	LC	IV		G	R
5	<i>Streptopelia orientalis</i> (Latham, 1790); Oriental Turtle Dove	LC	IV		G	R
6	<i>Streptopelia chinensis</i> (Scopoli, 1786); Spotted Dove	LC	IV		G	R
7	<i>Chalcophaps indica</i> (Linnaeus, 1758); Asian Emerald Dove	LC	IV		G	R
8	<i>Treron phoenicopterus</i> (Latham, 1790); Yellow-footed Green Pigeon	LC	IV		G	R
	Order Cuculiformes, Family Cuculidae					
9	<i>Centropus sinensis</i> (Stephens, 1815); Greater Coucal	LC	IV		O	R
10	<i>Phaenicophaeus viridirostris</i> (Jerdon, 1840); Blue-faced Malkoha	LC	IV		O	R
11	<i>Clamator jacobinus</i> (Boddaert, 1783); Pied Cuckoo	LC	IV		I	R
12	<i>Eudynamis scolopacea</i> (Linnaeus, 1758); Asian Koel	LC	IV		F	R
13	<i>Cacomantis sonneratii</i> (Latham, 1790); Banded Bay Cuckoo	LC	IV		I	R
14	<i>Cacomantis passerinus</i> (Vahl, 1797); Grey-bellied Cuckoo	LC	IV		I	R
15	<i>Surniculus dicruroides</i> (Hodgson, 1839); Fork-tailed Drongo Cuckoo	LC	IV		I	R
16	<i>Hierococcyx varius</i> (Vahl, 1797); Common Hawk Cuckoo	LC	IV		I	R
	Order Caprimulgiformes, Family Podargidae					
17	<i>Batrachostomus moniliger</i> Blyth, 1849; Sri Lanka Frogmouth	LC	I		C	R
	Order Caprimulgiformes, Family Caprimulgidae					
18	<i>Caprimulgus atripennis</i> Jerdon, 1845; Jerdon's Nightjar	LC	IV		I	R
19	<i>Caprimulgus asiaticus</i> Latham, 1790; Indian Nightjar	LC	IV		I	R
20	<i>Caprimulgus affinis</i> Horsfield, 1821; Savanna Nightjar	LC	IV		I	R
	Order Caprimulgiformes, Family Apodidae					
21	<i>Apus affinis</i> (J.E. Gray, 1830); Indian House Swift	LC	IV		I	R
22	<i>Cypsiurus balasensis</i> (J.E. Gray, 1829); Asian Palm Swift	LC	IV		I	R

	Species name	IUCN Red List 2021	IWPA 1972	CITES Appendix	Feeding guild	Migratory status
	Order Gruiformes, Family Rallidae					
23	<i>Amaurornis phoenicurus</i> (Pennant, 1769); White-breasted Waterhen	LC	IV		O	R
24	<i>Zapornia fusca</i> (Linnaeus, 1766); Ruddy-breasted Crake	LC	IV		O	R
	Order Charadriiformes, Family Charadriidae					
25	<i>Vanellus malabaricus</i> (Boddaert, 1783); Yellow-wattled Lapwing	LC	IV		C	R
26	<i>Vanellus indicus</i> (Boddaert, 1783); Red-wattled Lapwing	LC	IV		C	R
	Order Charadriiformes, Family Scolopacidae					
27	<i>Tringa ochropus</i> Linnaeus, 1758; Green Sandpiper	LC	IV		C	LD
	Order Charadriiformes, Family Turnicidae					
28	<i>Turnix sorsator</i> (J.F. Gmelin, 1789); Barred Buttonquail	LC	IV		C	R
	Order Ciconiiformes, Family Ciconiidae					
29	<i>Anastomus oscitans</i> (Boddaert, 1783); Asian Openbill	LC	IV		C	R
30	<i>Ciconia episcopus</i> (Boddaert, 1783); Woolly-necked Stork	NT	IV		C	R
	Order Suliformes, Family Phalacrocoracidae					
31	<i>Microcarbo niger</i> (Vieillot, 1817); Little Cormorant	LC	IV		C	R
	Order Pelecaniformes, Family Ardeidae					
32	<i>Ardea purpurea</i> Linnaeus, 1766; Purple Heron	LC	IV		C	R
33	<i>Ardea alba</i> Linnaeus, 1758; Great Egret	LC	IV		C	R
34	<i>Ardea intermedia</i> Wagler, 1829; Intermediate Egret	LC	IV		C	R
35	<i>Egretta garzetta</i> (Linnaeus, 1766); Little Egret	LC	IV		C	R
36	<i>Bubulcus ibis</i> (Linnaeus, 1758); Cattle Egret	LC	IV		C	R
37	<i>Ardeola grayii</i> (Sykes, 1832); Indian Pond Heron	LC	IV		C	R
	Order Pelecaniformes, Family Threskiornithidae					
38	<i>Threskiornis melanocephalus</i> (Latham, 1790); Black-headed Ibis	NT	IV		C	R
	Order Accipitriformes, Family Accipitridae					
39	<i>Pernis ptilorhynchus</i> (Temminck, 1821); Oriental Honey Buzzard	LC	I	II	C	R
40	<i>Spilornis cheela</i> (Latham, 1790); Crested Serpent Eagle	LC	I	II	C	R
41	<i>Hieraetus pennatus</i> (J.F. Gmelin, 1788); Booted Eagle	LC	I	II	C	LD
42	<i>Accipiter trivirgatus</i> (Temminck, 1824); Crested Goshawk	LC	I	II	C	R

	Species name	IUCN Red List 2021	IWPA 1972	CITES Appendix	Feeding guild	Migratory status
43	<i>Accipiter badius</i> (J.F. Gmelin, 1788); Shikra	LC	I	II	C	R
44	<i>Milvus migrans</i> (Boddaert, 1783); Black Kite	LC	I	II	C	R
45	<i>Haliastur indus</i> (Boddaert, 1783); Brahminy Kite	LC	I	II	C	R
46	<i>Haliaeetus leucogaster</i> (J.F. Gmelin, 1788); White-bellied Sea Eagle	LC	I	II	C	R
	Order Strigiformes, Family Tytonidae					
47	<i>Tyto alba</i> (Scopoli, 1769); Barn Owl	LC	IV	II	C	R
	Order Strigiformes, Family Strigidae					
48	<i>Athene brama</i> (Temminck, 1821); Spotted Owlet	LC	IV	II	C	R
49	<i>Strix leptogrammica</i> Temminck, 1832; Brown Wood Owl	LC	IV	II	C	R
	Order Bucerotiformes, Family Upupidae					
50	<i>Upupa epops</i> Linnaeus, 1758; Common Hoopoe	LC	IV		I	R
	Order Coraciiformes, Family Alcedinidae					
51	<i>Alcedo atthis</i> (Linnaeus, 1758); Common Kingfisher	LC	IV		C	R
52	<i>Alcedo meninting</i> Horsfield, 1821; Blue-eared Kingfisher	LC	IV		C	R
53	<i>Ceyx erithaca</i> (Linnaeus, 1758); Oriental Dwarf Kingfisher	LC	IV		C	R
54	<i>Pelargopsis capensis</i> (Linnaeus, 1766); Stork-billed Kingfisher	LC	IV		C	R
55	<i>Halcyon smyrnensis</i> (Linnaeus, 1758); White-throated Kingfisher	LC	IV		C	R
	Order Coraciiformes, Family Meropidae					
56	<i>Merops orientalis</i> Latham, 1801; Green Bee-eater	LC	IV		I	R
57	<i>Merops philippinus</i> Linnaeus, 1767; Blue-tailed Bee-eater	LC	IV		I	LM
58	<i>Merops leschenaulti</i> Vieillot, 1817; Chestnut-headed Bee-eater	LC	IV		I	R
	Order Coraciiformes, Family Coraciidae					
59	<i>Coracias garrulus</i> Linnaeus, 1758; European Roller	LC	IV		C	LD
60	<i>Coracias benghalensis</i> (Linnaeus, 1758); Indian Roller	LC	IV		C	R
	Order Piciformes, Family Megalaimidae					
61	<i>Psilopogon haemacephalus</i> (Statius Muller, 1776); Coppersmith Barbet	LC	IV		F	R
62	<i>Psilopogon viridis</i> (Boddaert, 1783); White-cheeked Barbet	LC	IV		F	R
	Order Piciformes, Family Picidae					
63	<i>Yungipicus nanus</i> (Vigors, 1832); Brown-capped Pygmy Woodpecker	LC	IV		O	R
64	<i>Micropternus brachyurus</i> (Vieillot, 1818); Rufous Woodpecker	LC	IV		O	R
65	<i>Dinopium benghalense</i> (Linnaeus, 1758); Black-rumped Flameback	LC	IV		I	R

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66	<i>Picus chlorolophus</i> Vieillot, 1818; Lesser Yellownappe	LC	IV		O	R
	Order Falconiformes, Family Falconidae					
67	<i>Falco tinnunculus</i> Linnaeus, 1758; Common Kestrel	LC	IV	II	C	LM
	Order Psittaciformes, Family Psittaculidae					
68	<i>Psittacula krameri</i> (Scopoli, 1769); Rose-ringed Parakeet	LC	IV		F	R
69	<i>Psittacula cyanocephala</i> (Linnaeus, 1766); Plum-headed Parakeet	LC	IV	II	F	R
70	<i>Loriculus vernalis</i> (Sparrman, 1787); Vernal Hanging Parrot	LC	IV	II	F	R
	Order Passeriformes, Family Pittidae					
71	<i>Pitta brachyura</i> (Linnaeus, 1766); Indian Pitta	LC	IV		I	LM
	Order Passeriformes, Family Campephagidae					
72	<i>Pericrocotus cinnamomeus</i> (Linnaeus, 1766); Small Minivet	LC	IV		I	R
73	<i>Pericrocotus flammeus</i> (J.R. Forster, 1781); Orange Minivet	LC	IV		I	R
74	<i>Coracina macei</i> (R. Lesson, 1831); Large Cuckooshrike	LC	IV		I	R
75	<i>Lalage melanopectera</i> (Rüppell, 1839); Black-headed Cuckooshrike	LC	IV		I	LM
	Order Passeriformes, Family Oriolidae					
76	<i>Oriolus kundoo</i> Sykes, 1832; Indian Golden Oriole	LC	IV		O	LM
77	<i>Oriolus chinensis</i> Linnaeus, 1766; Black-naped Oriole	LC	IV		O	LD
78	<i>Oriolus xanthornus</i> (Linnaeus, 1758); Black-hooded Oriole	LC	IV		O	R
	Order Passeriformes, Family Artamidae					
79	<i>Artamus leucorhynchus</i> Vieillot, 1817; Ashy Woodswallow	LC	IV		I	R
	Order Passeriformes, Family Vangidae					
80	<i>Tephrodornis pondicerianus</i> (J.F. Gmelin, 1789); Common Woodshrike	LC	IV		I	R
	Order Passeriformes, Family Aegithinidae					
81	<i>Aegithina tiphia</i> (Linnaeus, 1758); Common Iora	LC	IV		I	R
	Order Passeriformes, Family Dicruridae					
82	<i>Dicrurus macrocercus</i> Vieillot, 1817; Black Drongo	LC	IV		O	R
83	<i>Dicrurus leucophaeus</i> Vieillot, 1817; Ashy Drongo	LC	IV		O	LM
84	<i>Dicrurus aeneus</i> Vieillot, 1817; Bronzed Drongo	LC	IV		O	R
85	<i>Dicrurus paradiseus</i> (Linnaeus, 1766); Greater Racket-tailed Drongo	LC	IV		O	R

	Species name	IUCN Red List 2021	IWPA 1972	CITES Appendix	Feeding guild	Migratory status
	Order Passeriformes, Family Monarchidae					
86	<i>Hypothymis azurea</i> (Boddaert, 1783); Black-naped Monarch	LC	IV		I	R
87	<i>Terpsiphone paradisi</i> (Linnaeus, 1758); Indian Paradise-flycatcher	LC	IV		I	LM
	Order Passeriformes, Family Laniidae					
88	<i>Lanius cristatus</i> Linnaeus, 1758; Brown Shrike	LC	IV		I	LD
89	<i>Lanius schach</i> Linnaeus, 1758; Long-tailed Shrike	LC	IV		I	R
	Order Passeriformes, Family Corvidae					
90	<i>Dendrocitta vagabunda</i> (Latham, 1790); Rufous Treepie	LC	IV		O	R
91	<i>Corvus splendens</i> Vieillot, 1817; House Crow	LC	V		O	R
92	<i>Corvus macrorhynchos</i> Wagler, 1827; Large-billed Crow	LC	IV		O	R
	Order Passeriformes, Family Alaudidae					
93	<i>Mirafra affinis</i> Blyth, 1845; Jerdon's Bushlark	LC	IV		O	R
	Order Passeriformes, Family Cisticolidae					
94	<i>Orthotomus sutorius</i> (Pennant, 1769); Common Tailorbird	LC	IV		I	R
95	<i>Prinia hodgsonii</i> Blyth, 1844; Grey-breasted Prinia	LC	IV		I	R
96	<i>Prinia socialis</i> Sykes, 1832; Ashy Prinia	LC	IV		I	R
97	<i>Prinia inornata</i> Sykes, 1832; Plain Prinia	LC	IV		I	R
	Order Passeriformes, Family Acrocephalidae					
98	<i>Iduna rama</i> (Sykes, 1832); Sykes's Warbler	LC	IV		I	LD
99	<i>Acrocephalus dumetorum</i> Blyth, 1849; Blyth's Reed Warbler	LC	IV		I	LD
	Order Passeriformes, Family Hirundinidae					
100	<i>Hirundo rustica</i> Linnaeus, 1758; Barn Swallow	LC	IV		I	LM
101	<i>Hirundo smithii</i> Leach, 1818; Wire-tailed Swallow	LC	IV		I	R
102	<i>Cecropis daurica</i> (Laxmann, 1769); Red-rumped Swallow	LC	IV		I	R
	Order Passeriformes, Family Pycnonotidae					
103	<i>Brachypodius priocephalus</i> (Jerdon, 1839); Grey-headed Bulbul*	NT	IV		O	R
104	<i>Rubigula gularis</i> (Gould, 1836); Flame-throated Bulbul*	LC	IV		O	R
105	<i>Pycnonotus cafer</i> (Linnaeus, 1766); Red-vented Bulbul	LC	IV		O	R
106	<i>Pycnonotus jocosus</i> (Linnaeus, 1758); Red-whiskered Bulbul	LC	IV		O	R
107	<i>Pycnonotus luteolus</i> (Lesson, 1841); White-browed Bulbul	LC	IV		O	R

	Species name	IUCN Red List 2021	IWPA 1972	CITES Appendix	Feeding guild	Migratory status
108	<i>Acritillas indica</i> (Jerdon, 1839); Yellow-browed Bulbul	LC	IV		O	R
	Order Passeriformes, Family Phylloscopidae					
109	<i>Phylloscopus affinis</i> (Tickell, 1833); Tickell's Leaf Warbler	LC	IV		I	LM
110	<i>Phylloscopus nitidus</i> Blyth, 1843; Green Warbler	LC	IV		I	LD
	Order Passeriformes, Family Timaliidae					
111	<i>Pomatorhinus horsfieldii</i> Sykes, 1832; Indian Scimitar Babbler	LC	IV		I	R
	Order Passeriformes, Family Pellorneidae					
112	<i>Pellorneum ruficeps</i> Swainson, 1832; Puff-throated Babbler	LC	IV		I	R
	Order Passeriformes, Family Leiothrichidae					
113	<i>Argya striata</i> (Dumont, 1823); Jungle Babbler	LC	IV		O	R
114	<i>Argya affinis</i> (Jerdon, 1845); Yellow-billed Babbler	LC	IV		O	R
115	<i>Argya subrufa</i> (Jerdon, 1839); Rufous Babbler*	LC	IV		O	R
	Order Passeriformes, Family Sturnidae					
116	<i>Gracula indica</i> (Cuvier, 1829); Southern Hill Myna	LC	I		O	R
117	<i>Sturnia malabarica</i> (J.F. Gmelin, 1789); Chestnut-tailed Starling	LC	IV		O	LM
118	<i>Sturnia blythii</i> (Jerdon, 1845); Malabar Starling*	NE	IV		O	R
119	<i>Acridotheres tristis</i> (Linnaeus, 1766); Common Myna	LC	IV		O	R
120	<i>Acridotheres fuscus</i> (Wagler, 1827); Jungle Myna	LC	IV		O	R
	Order Passeriformes, Family Turdidae					
121	<i>Geokichla citrina</i> (Latham, 1790); Orange-headed Thrush	LC	IV		O	R
122	<i>Turdus simillimus</i> Jerdon, 1839; Indian Blackbird	LC	IV		O	LM
	Order Passeriformes, Family Muscicapidae					
123	<i>Muscicapa dauurica</i> Pallas, 1811; Asian Brown Flycatcher	LC	IV		I	LM
124	<i>Muscicapa muttui</i> (E.L. Layard, 1854); Brown-breasted Flycatcher	LC	IV		I	LD
125	<i>Copsychus fulicatus</i> (Linnaeus, 1766); Indian Robin	LC	IV		I	R
126	<i>Copsychus saularis</i> (Linnaeus, 1758); Oriental Magpie Robin	LC	IV		I	R
127	<i>Cyornis tickelliae</i> Blyth, 1843; Tickell's Blue Flycatcher	LC	IV		I	R
128	<i>Myiophonus horsfieldii</i> Vigors, 1831; Malabar Whistling Thrush	LC	IV		O	R
129	<i>Saxicola caprata</i> (Linnaeus, 1766); Pied Bushchat	LC	IV		I	R

	Species name	IUCN Red List 2021	IWPA 1972	CITES Appendix	Feeding guild	Migratory status
	Order Passeriformes, Family Dicaeidae					
130	<i>Dicaeum agile</i> (Tickell, 1833); Thick-billed Flowerpecker	LC	IV		N	R
131	<i>Dicaeum erythrorhynchos</i> (Latham, 1790); Pale-billed Flowerpecker	LC	IV		N	R
132	<i>Dicaeum concolor</i> Jerdon, 1840; Nilgiri Flowerpecker*	LC	IV		N	R
	Order Passeriformes, Family Nectariniidae					
133	<i>Leptocoma zeylonica</i> (Linnaeus, 1766); Purple-rumped Sunbird	LC	IV		N	R
134	<i>Cinnyris asiaticus</i> (Latham, 1790); Purple Sunbird	LC	IV		N	R
135	<i>Cinnyris lotenius</i> (Linnaeus, 1766); Loten's Sunbird	LC	IV		N	R
136	<i>Arachnothera longirostra</i> (Latham, 1790); Little Spiderhunter	LC	IV		O	R
	Order Passeriformes, Family Irenidae					
137	<i>Irena puella</i> (Latham, 1790); Asian Fairy-bluebird	LC	IV		O	R
	Order Passeriformes, Family Chloropseidae					
138	<i>Chloropsis jerdoni</i> (Blyth, 1844); Jerdon's Leafbird	LC	IV		O	R
139	<i>Chloropsis aurifrons</i> (Temminck, 1829); Golden-fronted Leafbird	LC	IV		O	R

	Species name	IUCN Red List 2021	IWPA 1972	CITES Appendix	Feeding guild	Migratory status
	Order Passeriformes, Family Estrildidae					
140	<i>Lonchura striata</i> (Linnaeus, 1766); White-rumped Munia	LC	IV		G	R
141	<i>Lonchura kelaarti</i> (Jerdon, 1863); Black-throated Munia	LC	IV		G	R
142	<i>Lonchura punctulata</i> (Linnaeus, 1758); Scaly-breasted Munia	LC	IV		G	R
	Order Passeriformes, Family Passeridae					
143	<i>Passer domesticus</i> (Linnaeus, 1758); House Sparrow	LC	IV		O	R
	Order Passeriformes, Family Motacillidae					
144	<i>Motacilla cinerea</i> Tunstall, 1771; Grey Wagtail	LC	IV		I	LM
145	<i>Motacilla flava</i> Linnaeus, 1758; Western Yellow Wagtail	LC	IV		I	LD
146	<i>Motacilla maderaspatensis</i> J.F. Gmelin, 1789; White-browed Wagtail	LC	IV		I	R
147	<i>Motacilla alba</i> Linnaeus, 1758; White Wagtail	LC	IV		I	LD
148	<i>Anthus rufulus</i> Vieillot, 1818; Paddyfield Pipit	LC	IV		I	R
149	<i>Anthus godlewskii</i> (Taczanowski, 1876); Blyth's Pipit	LC	IV		I	LD
	Order Passeriformes, Family Emberizidae					
150	<i>Emberiza buchanani</i> Blyth, 1845; Grey-necked Bunting	LC	IV		I	LD

LC—Least Concern | NT—Near Threatened | NE—Not Evaluated | C—Carnivorous | F—Frugivorous | G—Granivorous | I—Insectivorous | N—Nectarivorous | O—Omnivorous | *—Endemic to Western Ghats | R—Resident | LD—Migratory long distance | LM—Local migratory.



Image 1–15. 1—*Accipiter trivirgatus* | 2—*Milvus migrans* | 3—*Hieraaetus pennatus* | 4—*Pavo cristatus* | 5—*Haliaeetus leucogaster* | 6—*Batrachostomus moniliger* | 7—*Accipiter badius* | 8—*Haliastur indus* | 9—*Spilornis cheela* | 10—*Muscicapa muttui* | 11—*Phylloscopus affinis* | 12—*Hirundo rustica* | 13—*Lalage melanoptera* | 14—*Acrocephalus dumetorum* | 15—*Anthus godlewskii*. © Vineeth Kumar K and Prashantha Krishna MC.

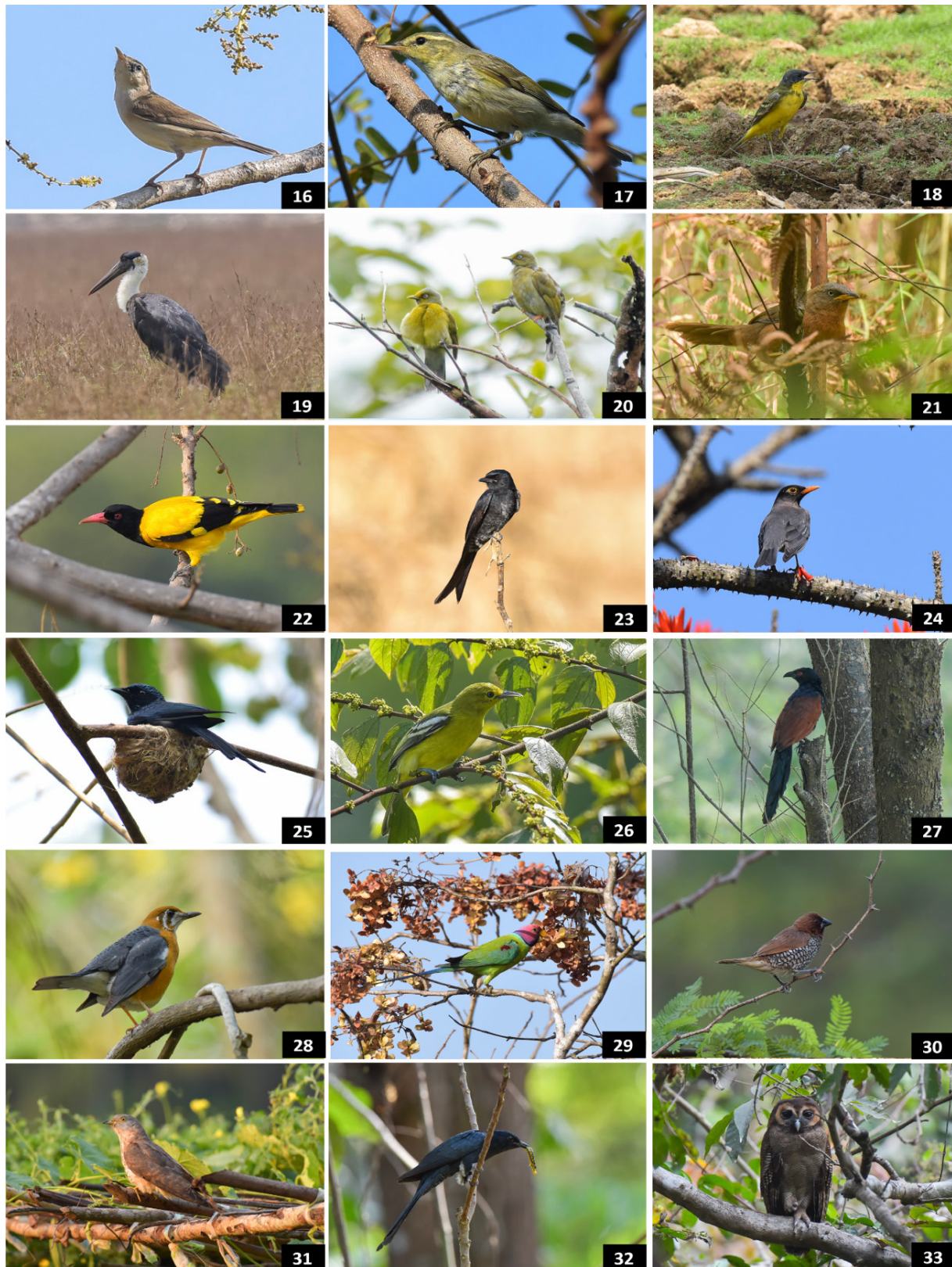


Image 16–33. 16—*Iduna rama* | 17—*Phylloscopus nitidus* | 18—*Motacilla flava* | 19—*Ciconia episcopus* | 20—*Brachypodius priocephalus* | 21—*Argya subrufa* | 22—*Oriolus xanthornus* | 23—*Dicrurus macrocercus* | 24—*Turdus simillimus* | 25—*Dicrurus aeneus* | 26—*Aegithina tiphia* | 27—*Centropus sinensis* | 28—*Geokichla citrina* | 29—*Psittacula cyanocephala* | 30—*Lonchura punctulata* | 31—*Hierococcyx varius* | 32—*Surniculus dicruroides* | 33—*Strix leptogrammica*. © Vineeth Kumar K and Prashantha Krishna MC.

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Communications

Asiatic Black Bear *Ursus thibetanus* attacks in Kashmir Valley, India

– Aaliya Mir, Shanmugavelu Swaminathan, Rashid Y. Naqash, Thomas Sharp & Attur Shanmugam Arun, Pp. 22355–22363

Food habits of the Red Fox *Vulpes vulpes* (Mammalia: Carnivora: Canidae) in Dachigam National Park of the Kashmir Himalaya, India

– Kulsum Ahmad Bhat, Bilal A. Bhat, Bashir A. Ganai, Aamir Majeed, Naziya Khurshid & Muniza Manzoor, Pp. 22364–22370

Status distribution and factors affecting the habitat selection by Sambar Deer *Rusa unicolor* in Pench Tiger Reserve, Madhya Pradesh, India

– Abdul Haleem & Orus Ilyas, Pp. 22371–22380

Assessing illegal trade networks of two species of pangolins through a questionnaire survey in Nepal

– Nikita Phuyal, Bipana Maiya Sadadev, Reeta Khulal, Rashmi Bhatt, Santosh Bajagain, Nirjala Raut & Bijaya Dhami, Pp. 22381–22391

First occurrence record of Indian Roundleaf Bat *Hipposideros lankadiva* in Rajasthan, India

– Dharmendra Khandal, Dau Lal Bohra & Shyamkant S. Talmale, Pp. 22392–22398

Food availability and food selectivity of Sri Lanka Grey Hornbill *Ocyrceros gingalensis* Shaw, 1811 in Mihintale Sanctuary, Sri Lanka

– Iresha Wijerathne, Pavithra Panduwawala & Sriyani Wickramasinghe, Pp. 22399–22409

Conservation significance of Changaram wetlands - a key wintering site for migratory shorebirds and other waterbirds in the western coast of Kerala, India

– Jasmine Anand, H. Byju, Aymen Nefla, S. Abhijith, Omer R Reshi & K.M. Aarif, Pp. 22410–22418

Long-term monitoring of pelicans in National Chambal Sanctuary, India

– Lala A.K. Singh & Rishikesh Sharma, Pp. 22419–22429

A checklist of avifauna of Mangalore University, Karnataka, India

– K. Maxim Rodrigues, K. Vineeth Kumar, Vivek Hasyagar, M.C. Prashantha Krishna & Deepak Naik, Pp. 22430–22439

Biology of *Bhutanitis ludlowi* Gabriel, 1942 (Lepidoptera: Papilionidae) Bumdeling Wildlife Sanctuary, Bhutan

– Tshering Dendup, Namgay Shacha, Karma Tempa & Tez Bdr Ghalley, Pp. 22440–22447

Biodiversity of butterflies (Lepidoptera: Rhopalocera) in the protected landscape of Nandhour, Uttarakhand, India

– Hem Chandra, Manoj Kumar Arya & Aman Verma, Pp. 22448–22470

A comparison of four sampling techniques for assessing species richness of adult odonates at riverbanks

– Apeksha Darshetkar, Ankur Patwardhan & Pankaj Koparde, Pp. 22471–22478

Floristic diversity of native wild ornamental plants of Aravalli Hill Range: a case study from district Rewari, Haryana, India

– Pradeep Bansal, Amrender Singh Rao, Surender Singh Yadav, M.S. Bhandoria & S.S. Dash, Pp. 22479–22493

Flowering and fruiting of Tape Seagrass *Enhalus acoroides* (L.f.) Royle from the Andaman Islands: observations from inflorescence buds to dehiscent fruits

– Swapnali Gole, Sivakumar Kuppusamy, Himansu Das & Jeyaraj Antony Johnson, Pp. 22494–22500

Short Communications

Status of Swamp Deer *Rucervus duvaucelii duvaucelii* (G. Cuvier, 1823) in grassland-wetland habitats in Dudhwa Tiger Reserve, India

– Sankarshan Rastogi, Ashish Bista, Sanjay Kumar Pathak, Pranav Chanchani & Mudit Gupta, Pp. 22501–22504

First photographic evidence of Indian Pangolin *Manis crassicaudata* Geoffroy, 1803 (Mammalia: Pholidota: Manidae), in Colonel Sher Jung National Park, Himachal Pradesh, India

– Nidhi Singh, Urjit Bhatt, Saurav Chaudhary & Salvador Lyngdoh, Pp. 22505–22509

The Marine Otter *Lontra felina* (Molina, 1782) (Mammalia: Carnivora: Mustelidae) along the marine protected areas in Peru

– José Pizarro-Neyra, Pp. 22510–22514

First record of the genus *Acropyga* Roger, 1862 (Hymenoptera: Formicidae: Formicinae) in Kerala, India

– Merin Elizabeth George & Gopalan Prasad, Pp. 22515–22521

First report of a coreid bug *Aurelianus yunnananus* Xiong, 1987 (Hemiptera: Heteroptera: Coreidae) from India

– Hemant V. Ghate, Pratik Pansare & Rahul Lodh, Pp. 22522–22527

First record of the long-horned beetle *Niphona fuscatrix* (Fabricius, 1792) (Coleoptera: Cerambycidae: Lamiinae) from the Western Ghats, India

– Yogesh K. Mane, Priyanka B. Patil & Sunil M. Gaikwad, Pp. 22528–22532

Incidence of *Clinostomum complanatum* (Trematoda: Clinostomidae) in *Trichogaster fasciata* (Actinopterygii: Osphronemidae), the first report from Deepor Beel, Assam, India

– Bobita Bordoloi & Arup Kumar Hazarika, Pp. 22533–22537

Sauromatum horsfieldii (Araceae): a new addition to the flora of Manipur, northeastern India

– Kazuhrii Eshuo & Adani Lokho, Pp. 22538–22542

Rhynchostegiella menadensis (Sande Lac.) E.B. Bartram and *R. scabriseta* (Schwagr.) Broth.: two new records of mosses (Brachytheciaceae: Bryophyta) for peninsular India

– V.K. Rajilesh, C.N. Manju & R. Prakashkumar, Pp. 22543–22547

Notes

Installation of hot boxes for conservation in the last nursery roost of Greater Horseshoe Bats *Rhinolophus ferrumequinum* in Austria

– Lukas Zangl, Alexander Gutstein, Wolfgang Paill, Edmund Weiss & Peter Sackl, Pp. 22548–22550

New prey record of giant ladybird beetle *Anisolemnia dilatata* (Fabricius) (Coccinellidae: Coleoptera) feeding on Som Plant Aphid *Aiceona* sp.

– Suprakash Pal, Biwash Gurung, Ponnusamy Natarajan & Partha Sarathi Medda, Pp. 22551–22555

Book Review

Book Review - Under the Feet of Living Things

Editors — Aparajita Datta, Rohan Arthur & T.R. Shankar Raman

– Review by Melito Prinson Pinto, Pp. 22556–22558

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