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SHORT COMMNUNICATION

A CHECKLIST OF AVIFAUNA FROM MALGAON-BAGAYAT AND MALVAN TOWNS OF SINDHUDURG DISTRICT, MAHARASHTRA, INDIA

Mayura Khot

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A CHECKLIST OF AVIFAUNA FROM MALGAON-BAGAYAT AND MALVAN TOWNS OF SINDHUDURG DISTRICT, MAHARASHTRA, INDIA

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Abstract: The present work was carried out in Malgaon-Bagayat (16°09'04.35"N & 73°33'04.7"E) and Malvan Taluka (16°05'00"N & 73°30'00"E) of Sindhudurg District. The paper represents the first document on birds as there are no published records from Sindhudurg District. The study was conducted for a period of two years to explore the avifauna as no records have been published yet from this area. A total of 101 species of birds belonging to 17 orders and 45 families and were recorded in the study areas inhabiting different types of habitats. The Order Passeriformes contributed the maximum species (44.9%) followed by Pelecaniformes (9.2%), Charadriiformes (8.2%) and Accipitriformes (6.1%). The species such as the Asian Paradise Flycatcher, Common Hoopoe, and Pied Kingfisher were observed only once in the study area. The common occurrence of the Near Threatened Malabar Pied Hornbill in Bagayat signifies the ornithological importance of this site. Long-term studies on distribution and abundance are required to prepare a conservation plan for avifauna in Sindhudurg District. The data generated can be considered as baseline data for future conservation and management of existing species.

Keywords: Conservation, Malabar Pied Hornbill, Malgaon-Bagayat, Malvan, plantations, threats.

The Western Ghats (Sahyadris) constitute a 1,600km long system along the west coast originating from the north of the Tapi River and extending up to Kanyakumari at the southernmost tip of the Indian peninsula. The evergreen and moist deciduous forests of Western Ghats are found to hold the largest bird community. Covering an area of 1,60,000km², the ghats crosses six

states: Gujarat, Maharashtra, Goa, Karnataka, Tamil Nadu and Kerala. The Western Ghats separates the inland Deccan Plateau from the coastal strip known as the Konkan region. The Konkan region being part of Maharashtra State comprises five districts i.e., Thane, Mumbai, Raigad, Ratnagiri and Sindhudurg of which Sindhudurg District is surrounded by the Arabian Sea on the west, Amboli Ghats and Belgaum on the south, Ratnagiri towards the north and the Sahyadri Hill ranges towards the east. Earlier the district was situated in Ratnagiri District but due to administrative convenience, industrial and agricultural development it was separated as Ratnagiri and Sindhudurg districts with effect from 01 May 1981. The district has its unique natural beauty with lush green rice fields, mango orchards, hill ranges, thick forests, large coastline, beaches, temples, historical forts, waterfalls which are important resources for tourist and also for variety of birds and animals. As birds form an important component in the natural ecosystem, they play a useful role in the control of insects, as scavengers, predators, seed dispensers and as pollinating agents. They are susceptible to landscape-level changes in the environment such as habitat fragmentation (Wilcove 1985) population level changes in breeding success and survival rates which may reflect changes in the

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Avifauna of two Maharashtra towns

environment (Baillie 1991).

In the late 19th century, studies on avifaunal diversity had received more attention by various workers such as Ali & Abdulali (1936–1939), Abdulali & Ali (1940), Abdulali (1973), Gole (1994, 1998), Bharucha & Gogate (1990), Mahabal (1989), Kurhade (1996, 2010), Ali S. (2002), Pande (2003) from Western Ghats and the south western parts of Maharashtra. Records published from the Konkan region and adjoining areas were supported by Vidal (1880), Soman (1963), Samant (1986), (Shanbhag et al. 2001), Prasad (2003) and (Mahabal et al. 2011). However, there is a lack of recent reports of avifauna from the Konkan region. Avifauna in Malvan Town and Bagayatwadi of Sindhudurg District have not been studied yet. Hence, the aim of the present study was to explore the avifauna around Malgaon Village of Bagayatwadi and Malvan towns from Sindhudurg district.

STUDY AREA

The Sindhudurg District is situated between 15.37⁰– 16.40°N & 73.19°-74.18°E. It covers an area of about 5,207km² and coastline of about 121km. The district name has been adopted from the Sindhudurg fort constructed by Shivaji Maharaj in 1664. It was declared as "tourism district" by the Government of Maharashtra in 1997. Being a coastal district, the climate is generally moist and humid and the temperature varies with a minimum of 16.3°C to a maximum of 33.8°C. The average rainfall is 3,287mm (http://sindhudurg.nic.in). The forest of Sindhudurg is semi-evergreen, dry deciduous and moist deciduous (Punde 2008). The Sindhudurg fort, scenic beaches, dolphin watches, houseboat stays, and marine sanctuary at Malvan attract many tourists every year. Apart from tourism it is famous for major crops like Rice, Mango, Coconut, Cashew and Kokam which supports good employment business for local people. The district comprises eight talukas such as Devgad, Vaibhavwadi, Kankavli, Malvan, Vengurla, Kudal, Savantwadi and Dodamarg. The study was conducted in Malvan Taluka which consists of two sites, Malvan town and Bagayatwadi of Malgaon village (Fig. 1). Malvan town is situated about 1.5km opposite the Sindhudurg fort island with an open coastal ecosystem dominated by rocky islands, rocky and sandy beaches. The town hosts human settlements with coconut plantations (32%), upland with/without shrub (36%), forest cover (15%), agricultural land (8%), mudflat (4%), rocky islands (1%), mangrove area (1%) and remaining with fallow land, irrigation tanks and water bodies (ICMAM Report 2001). The Malgaon village is situated 18km away from



Image 1. Pundanus sp. vegetation

Malvan town which covers an area of about 1154ha comprising twelve small settlements (http://www. malgaon-malvan.mahapanchayat.gov.in). The study was conducted in one of the small settlements namely Bagayatwadi (16°09'04.35"N & 73°33'04.7"E) situated in Malgaon village covering an area of about 2.36km² and Malvan town 16º05'00'N & 73º30'00'E with an area of about 13.42km². The vegetation of Bagayat is semievergreen with cultivations whereas dry deciduous in the open hill plains. The Bagayat has a flowing stream which arises from Gad River with its edges covered with dense patches of *Pundanus* spp. vegetation (Image 1). Agricultural crops mainly cultivated are Rice, Nachani, Groundnut, Mustard seeds, Horse gram, Green gram, Black gram grown in the summer season whereas Long bean, Snake gourd, Pumpkin, Cucumber, Ladies finger, Bitter gourd and Melon in the rainy season. The dominant vegetation type is Acacia auriculiformis, and scattered trees of Cocos nucifera, Artocarpus integrifolia, Eugenia jambolana, Ficus bengalensis, Tectona grandis, Psidium guajava, Garcinia indica, Bombax malabaricum, Cinnamomum temala, Ficus tsjakela, Aegle marmelos, Ocimum tenuiflorum, Azadirachta indica, and plantations like Anacardium occidentale and Mangifera indica. Shrubs such as Carissa carandas, Hibiscus rosa-sinensis, Mimosa pudica, Zizyphus rogosa, Adhatoda vasica, Loranthus longiflorus are naturally present on the road side and also planted by villagers. Spices including Black pepper, Cinnamon, Nutmeg, and Clove are also grown and naturally present in the study area.

MATERIAL AND METHODS

The study was conducted seasonally for a period of two years from November 2011 to November 2013. Field surveys were carried out in winter, summer



Figure 1. Study area (Source: Google Earth)

and the monsoon season seven days in a month from morning 0630 to 1100 hours and from evening 1600 to 1900 hours. Observations were done by direct sighting and photographs were taken with a Cannon SX520 HS camera with 20X optical zoom. Identification was done with the help of a standard field guide (Grimmet et al. 2011). Different habitats as well as nesting sites were also noted. Percentage occurrence of families was calculated by the method of Basavarajappa (2006). Species richness was calculated by recording the number of bird species observed in each habitat of the study area. The status of birds were classified as Resident (R), Winter visitor (WV) and Former range (FR) based on Grimmet et al. (2011).

RESULTS AND DISCUSSION

The present study records a total of 101 species of birds belonging to 45 families from Malvan and Bagayat (Table 1; Images 2–14). Out of a total of 101 species, 89 were resident, 11 were winter visitor and 1 was former range. Order Passeriformes showed the maximum species diversity followed by Pelecaniformes, Charadriiformes and Accipitriformes (Table 2). Based on IUCN 2014 Red Table 1. Checklist of birds from Malgaon-Bagayat and Malvan town of Sindhudurg District (classification as per Manakadan & Pittie 2004).

	Common name	Scientific name	Habitat	Status	IUCN status
	Accipitridae	ccipitridae			
1	Brahminy Kite	Haliastur indus (Boddaert, 1783) Ri, RS, Tc		R	LC
2	Black Kite	Milvus migrans (Boddaert, 1783) RS, OfG, AH		R	LC
3	Crested Serpent Eagle	Spilornis cheela (Latham, 1790)	OfG, Ts	R	LC
4	Crested Hawk Eagle	Nisaetus cirrhatus (Gmelin, 1788)	OfG	R	LC
5	White-eyed Buzzard	Butastur teesa (Franklin, 1832)	OfG	R	LC
6	Shikra	Accipiter badius (Gmelin, 1788)	OfG, Ac, Ts	R	LC
	Ardeidae				
7	Cattle Egret	Bubulcus ibis (Linnaeus, 1758)	MgS, HH, Cl, PF	R	LC
8	Little Egret	Egretta garzetta (Linnaeus, 1766)	MgS, Tc	R	LC
9	Intermediate Egret	Mesophoyx intermedia (Wagler, 1829)	MgS, Tc	R	LC
10	Greater Egret	Casmerodius albus (Linnaeus, 1758)	MgS, Tc	R	LC
11	Indian Pond Heron	Ardeola grayii (Sykes, 1832)	MgS, FwS, Tc, Pu	R	LC
12	Black-crowned Night-Heron	Nycticorax nycticorax (Linnaeus, 1758)	MgS, Tc	R	LC
13	Striated Heron	Butorides striata (Linnaeus, 1758)	MgS, FwS, RS, FwR	R	LC
14	Grey Heron	Ardea cinerea Linnaeus, 1758	Ri, MgS, RS,SS	WV	LC
15	Purple Heron	Ardea purpurea Linnaeus, 1766	MgS	R	LC
16	Western Reef Egret	Egretta gularis (Bosc, 1792)	RS,Ri	WV	LC
	Bucerotidae				
17	Malabar Pied Hornbill	Anthracoceros coronatus (Boddaert, 1783)	Mn, OfG, FcB, Co	FR	NT
18	Indian Grey Hornbill	Ocyceros birostris (Scopoli, 1786)	Mn, OfG, Co, FcB	R	LC
	Irenidae				
19	Common Lora	Aegithina tiphia (Linnaeus, 1758)	Ac, MV, OfG	R	LC
20	Jerdon's Leafbird	Chloropsis cochinchinensis (Gmelin, 1788)	Ac, Bm	R	LC
	Passeridae				
21	House Sparrow	Passer domesticus (Linnaeus, 1758)	HH, CI,	R	LC
22	Chestnut-shouldered Petronia	Petronia xanthocollis (Burton, 1838)	Ts, OfG	R	LC
	Nectariniidae				
23	Purple rumped Sunbird	Nectarinia zeylonica (Linnaeus, 1766)	Ac, MV	R	LC
24	Crimson Sunbird	Aethopyga siparaja (Raffles, 1822)	Ac, MV	R	LC
	Corvidae				
25	House Crow	Corvus splendens Vieillot, 1817	нн, ан	R	LC
26	Indian Jungle Crow	Corvus macrorhynchos Wagler, 1827	AH, MV	R	LC
27	Rufous Treepie	Dendrocitta vagabunda (Latham, 1790)	Gc	R	LC
	Dicruridae				
28	Black Drongo	Dicrurus macrocercus Vieillot, 1817	AH, CI,	R	LC
29	Greater Racket-tailed Drongo	Dicrurus paradiseus (Linnaeus, 1766)	AH, CI,	R	LC
	Muscicapidae				
30	Tickell's Blue Flycatcher	Cyornis tickelliae Blyth, 1843	Ac, MV	R	LC
31	Pied Bushchat	Saxicola caprata (Linnaeus, 1766)	AH,MV	R	LC
	Alcedinidae				
32	White-breasted Kingfisher	Halcyon smyrnensis (Linnaeus, 1758)	FwR, FwS, MgS, Tc	R	LC
33	Lesser Pied Kingfisher	Ceryle rudis (Linnaeus, 1758)	FwR, FwS, MgS, Tc	R	LC
34	Stork-billed Kingfisher	Halcyon capensis (Linnaeus,1766)	FwR, FwS, MgS, Tc	R	LC
	Meropidae				
35	Small Bee-eater	Merops orientalis Latham, 1801	AH, CI, Ts	R	LC
36	Blue Bearded Bee-eater	Nyctyornis athertoni (Jardine & Selby, 1828)	OfG	R	LC
	Charadriidae				
37	Red Wattled Lapwing	Vanellus indicus (Boddaert, 1783)	MgS, Ogl, FwS,	R	LC
38	Little Ringed Plover	Charadrius dubius Scopoli, 1786	SS, RS	WV	LC

	Common name	Scientific name	Habitat	Status	IUCN status
	Pycnonotidae				
39	Red Vented Bulbul	Bulbul Pycnonotus cafer (Linnaeus, 1766) MV, Ac, HH, Ts		R	LC
40	Red Whiskered Bulbul	niskered Bulbul Pycnonotus jocosus (Linnaeus, 1758)		R	LC
	Turdidae				
41	Indian Robin	Saxicoloides fulicata (Linnaeus, 1776)	Cl, Ts	R	LC
42	Oriental Magpie Robin	Copsychus saularis (Linnaeus, 1758)	MV, Ts, HH	R	LC
43	Orange-headed Thrush	Zoothera citrine (Latham, 1790)	MV, Cl,	R	LC
	Coraciidae				
44	Indian Roller	Coracias benghalensis (Linnaeus, 1758)	Ac, MV, OfG,LI	R	LC
	Oriolidae				
45	Black Hooded Oriole	Oriolus xanthornus (Linnaeus, 1758)	Ts, MV	R	LC
46	Eurasian Golden Oriole	Oriolus oriolus (Linnaeus, 1758)	Ts, MV	R	LC
	Phasianidae				
47	Indian Peafowl	Pavo cristatus Linnaeus, 1758	OfG, Cl	R	LC
48	Jungle Bush Quail	Perdicula asiatica (Latham, 1790)	OfG,	R	LC
	Sylviidae				
49	Common Tailor-bird	Orthotomus sutorius (Pennant, 1769)	HH, AH, FwS,	R	LC
50	Ashy Prinia	Prinia socialis Sykes, 1832	Pu	R	LC
51	Grey-breasted Prinia	Prinia hodgsonii Blyth, 1844	MV	R	LC
52	Plain Prinia	Prinia inornata Sykes, 1832	MV	R	LC
53	Zitting Cisticola	Cisticola juncidis (Rafinesque, 1810)	Ofg	R	LC
	Timaliidae				
54	Jungle Babbler	Turdoides striatus (Dumont, 1823)	OfG, Ts	R	LC
	Rhipidurinae				
55	White-spotted Fantail	Rhipidura albicollis (Vieillot, 1818)	MV, Cl, HH	R	LC
	Picidae				
56	Yellow-crowned Woodpecker	Dendrocopos mahrattensis (Latham, 1801)	Ts, OfG	R	LC
57	Lesser Golden Back	Dinopium benghalense (Linnaeus, 1758)	Co, Bm	R	LC
	Psittacidae				
58	Rose Ringed Parakeet	Psittacula krameri (Scopoli, 1769)	СІ, НН	R	LC
59	Vernal Hanging Parrot	Loriculus vernalis (Sparrman, 1787)	Gc, MV	R	LC
60	Plum-headed Parakeet	Psittacula cyanocephala (Linnaeus, 1766)	MV	R	LC
	Estrildidae				
61	White-rumped Munia	Lonchura striata (Linnaeus, 1766)	CI, MV	R	LC
	Laniidae				
62	Bay-backed Shrike	Lanius vittatus Valenciennes, 1826	OfG, Cl, Ts	R	LC
63	Long-tailed Shrike	Lanius schach Linnaeus, 1758	OfG, Cl, Ts	R	LC
	Hirundinidae				
64	Red Rumped Swallow	Hirundo daurica Linnaeus, 1771	HH, MV	R	LC
65	Wire-tailed Swallow	Hirundo smithii Leach, 1818	MV	R	LC
	Campephagidae				
66	Small Minivet	Pericrocotus cinnamomeus (Linnaeus, 1766)	Mn, Ac	R	LC
67	Orange Minivet	Pericrocotus flammeus (Forster, 1781)	MV, Mn, Bm	R	LC
	Phalacrocoracidae				
68	Little Cormorant	Phalacrocorax niger (Vieillot, 1817)	FwS, FwR, MgS	R	LC
	Scolopacidae				
69	Common Sandpiper	Actitis hypoleucos Linnaeus, 1758	SS, RS	WV	LC
70	Wood Sandpiper	Tringa glareola Linnaeus, 1758	MgS, Tc, Rs	WV	LC
71	Common Redshank	Tringa tetanus (Linnaeus, 1758)	Tc, MgS	WV	LC
72	Common Snipe	Gallinago gallinago (Linnaeus, 1758)	RS, Tc, MgS	WV	LC
	Motacillidae				

73 Yellow Wagtall Motacilla flave Linnaeus, 1758 FwS, WV LC 74 White-browed Wagtall Motacillo madersopatensis Greenin, 1789 Tc, R LC 75 Paddy Field Pipit Anthus rufulus Viellot, 1818 OfG R LC 76 Spotted Dove Streptopelia chanesis (Scopoli, 1766) AH, CJ, OfG R LC 77 Red-collared Dove Streptopelia transportenic (Lemmann, 1900) CJ, CL R LC 78 Wellow-footed Green Pigeon Tercon pheericoptrac (Lehrann, 1750) CJ, CL R LC 79 Blue Rock Rigeon Columba hivo Greelin, 1788 Mr, MV, LI R LC 70 Georgesmith Barbet Megalaima azyanica (Garelin, 1788) Mn, MV, LI R LC 71 Couron Mark Cellow Normon Hawk R LC 72 Asian Koel Europace (Linnaeus, 1756) AH, HH, CI R LC 73 Stormon Hawk Acridotheres fuscu (Linnaeus, 1756) AH, HH, CI R LC </th <th></th> <th>Common name</th> <th>Scientific name</th> <th>Habitat</th> <th>Status</th> <th>IUCN status</th>		Common name	Scientific name	Habitat	Status	IUCN status
74 White-browed Wagtall Motocillo maderaspotensis Gmelin, 1789 Tc, R LC 75 Paddy Field Pijot Anthus rufulus Viello, 1818 Orf R LC 76 Spotted Dove Streptopelio chaneus (Scopoli, 1786) AH, Cl, OrfG R LC 77 Red-collared Dove Streptopelio tranguebarica (Hermann, 1804) MV, Ts R LC 78 Yellow-footed Green Pigeon Teron pheenkoptera (Latham, 1790) CJ, CDI R LC 78 Bue Rock Pigeon Columba Ilvia Gmelin, 1788) Mn, W, U R LC 70 Bue Rock Pigeon Megalaima beamacephala (Müller, 1776) MV, Hi, LI R LC 70 Couridae Corpersmith Barbet Megalaima beamacephala (Müller, 1776) MV, Hi, LI R LC 70 Couridae Eudynamys scolapocea (Linnaeus, 1758) AH, Cl R LC 80 Southern Coucal Certropus simensis (Stephens, 1815) MM, MC R LC 81 Common Myna Acridatheres fuscus (Wagter, 1827)	73	Yellow Wagtail	Motacilla flava Linnaeus, 1758	FwS,	WV	LC
75 Paddy Field Pipit Anthus nylulus Vieillot, 1818 OfG R ILC 76 Sported Dove Streptopelia chinensis (Scopoli, 1786) AH, CJ, OfG R ILC 77 Red collared Dove Streptopelia chinensis (Scopoli, 1786) AH, CJ, OfG R ILC 78 Yellow-footed Green Pigeon Treron phenicoptera (Latham, 1790) C, R ILC 78 Yellow-footed Green Pigeon Columba livia Gmelin, 1789 HH, MV R ILC 79 Blue Rock Pigeon Columba livia Gmelin, 1789 MH, MV, U R ILC 79 Blue Rock Pigeon Columba livia Gmelin, 1789 MM, MV, U R ILC 70 Captonidae Megalaima zeylanica (Gmelin, 1788) MN, MV, U R ILC 80 Brown Headed Barbet Megalaima hearnocephala (Müller, 1776) MV, HH, IL R ILC 81 Comport Routal Cartropta sinemis (Stephopens, 1815) Mn, MV, CL R ILC 82 Asian Koel Asird Aridotheres fristis (Linaeus, 1766) AH, HH, CL R ILC 85 Common Myna Acridotheres fristis (Linaeus, 1756) AH, HH, CL R ILC 86 Jaueldoe Common Crested Lark Ga	74	White-browed Wagtail	Motacilla maderaspatensis Gmelin, 1789	Tc,	R	LC
Columbidae Columbidae Streptopelia chinensis (scopoli, 1786) AH, CI, OFG R LC 76 Spotted Dove Streptopelia traquebarica (Hermann, 1804) MV, Ts R LC 77 Red-collared Dove Streptopelia traquebarica (Hermann, 1804) MV, Ts R LC 78 Vellow-footed Green Pigeon Terron phaenicoptera (Latham, 1790) Cl, R LC 79 Blue Rock Rigeon Columba livio Gmelin, 1789 HH, MV R LC 80 Brown Headed Barbet Megalaima zeylanica (Gmelin, 1788) Mn, MV, LI R LC 81 Coppersmith Barbet Megalaima aevlanica (Gmelin, 1788) MN, MV, CI R LC 82 Asian Koel Eudynamys scolopacea (Linnaeus, 1758) AH, CI R LC 83 Southern Coucal Centropus sinensis (Stephens, 1915) MM, MV, CI R LC 84 Common Mawa Acridotheres ristis (Linnaeus, 1766) AH, HH, CI R LC 85 Common Crested Lark Galerida cristata (Linnaeus, 1758) <	75	Paddy Field Pipit	Anthus rufulus Vieillot, 1818 OfG		R	LC
76 Spotted Dove Streptopella chinensis (Scopoli, 1786) AH, CI, Offs R ILC 77 Red-collared Dove Streptopella tranyubarica (Hermann, 1804) MV, Ts R ILC 78 Yellow-doxed Green Pigeon Tercon phoenicaptera (Latham, 1790) Cl. R ILC 79 Blue Rock Pigeon Columba livia Gmelin, 1789 HH, MV R ILC Coprennith Barbet Megolatima haemacephala (Müller, 1776) MV, HH, II R ILC Coundae Eudynamys scolapacea (Linnaeus, 1758) AH, CI R ILC Sunidae Eudynamys scolapacea (Linnaeus, 1758) Mn, MV, CI R ILC Sunidae Eudynamys scolapacea (Linnaeus, 1758) Mn, MV, CI R ILC Sunidae Eudynamys scolapacea (Linnaeus, 1750) MN MV R ILC Sunidae Eudynamys scolapacea (Linnaeus, 1750) Mn, MV, CI R ILC Sunidae Acridotheres fristis (Linnaeus, 1750) MH, HH, CI R ILC Sunidae Acridotheres fristis (Linnaeus, 1750)		Columbidae				
77Red-collared DoveStreptopela transplantation (Hermann, 1900)W, TsRL.C.78Vellow-footed Green PigeonTercon phoenicaptera (Latham, 1790)C, LocaRU.C.79Blue Rock PigeonColumba Inio Gmelin, 1789HH, MVRU.C.70CapitonidaeMegalaima explance (Amelin, 1788)Mn, WL URU.C.80Broom Headed BarbetMegalaima explance (Amelin, 1788)Mn, WL URU.C.81CoulidaeMegalaima explance (Amelin, 1788)Mn, WL URU.C.82Asian KoelEudynamy scolopace (Linnaeus, 1758)Mn, WL CIRU.C.83Southen CoucalCentropasiensis (Stephens, 1815)Mn, MV, CIRU.C.84Southen CoucalCentropasiensis (Stephens, 1815)Mn, MV, CIRU.C.85Southen CoucalCentropasiensis (Stephens, 1815)Mn, MV, CIRU.C.86Southen CoucalCentropasiensis (Stephens, 1815)Mn, MV, CIRU.C.87Gamon AryaAcridotheres tristic (Linnaeus, 1768)AH, H, CIRU.C.88Asian Paradise FlycatcherFrepsiphone paradise (Linnaeus, 1758)Mn, MCRU.C.91MonarchineaeAnauromis phoenicurus (Pennant, 1769)Pu, FwaMM92Nilhie-breasted WaterhenAnauromis phoenicurus (Pennant, 1769)Mn, MCRU.C.93Minite-breasted WaterhenDicaeum concolar lerdon, 1840M/URU.C.	76	Spotted Dove	Streptopelia chinensis (Scopoli, 1786)	AH, Cl, OfG	R	LC
780Yellow-footed Green PigeonTeron phoenicaptera (Latham, 1790)Cl,RILC9Blue Rock PigeonColumba luka Genein, 1789HH, MVRILC1CaptonidaeMegalaina seylonica (Gmelin, 1788)Mn, MV, IIRILC81Sorom headed BarbetMegalaina seylonica (Gmelin, 1788)Mn, MV, IIRILC81CoulidaeMegalaina seylonica (Gmelin, 1788)Mn, MV, IIRILC82Asian KoelEudynamys scolopacea (Linaeus, 1758)AH, CIRILC83Southern CoucalCentrapus sinensis (Stephens, 1815)Mn, MV, CIRILC84Common Hawk CuckooHierococyx varius (Vahi, 1797)MVRILC85Common MynaAcridotheres tristis (Linaeus, 1766)AH, H, CIRILC86JaudidaeGalerida cristata (Linaeus, 1758)Ofs, CIRILC87MonarchinaeTerspiphone paradise (Linaeus, 1758)Mn, MVRILC88Aisan Paradise FlycatcherTerspiphone paradise (Linaeus, 1759)Mn, MC, CIRILC90White-breasted MaterhenAnauronis phoenicurus (Pennant, 1769)Mn, MC, CIRILC91Thick-billed FlowerpeckerDicaeum conclar Jerdon, 1840MVRILC92Nigerif HowerpeckerDicaeum conclar Jerdon, 1840MVRILC93Niche-breasted WaterhenDicaeum conclar Jerdon, 1840MVRILC94Hite-breasted Materh	77	Red-collared Dove	Streptopelia tranquebarica (Hermann, 1804)	MV, Ts	R	LC
79Blue Rock PigeonColumba livia Gmelin, 1789HH, MVRICCCapitonidaeCapitonidaeMandVLRICC80Brown Headed BarbetMegalaima zeylanica (Gmelin, 1788)Mn, MV, LIRICC81Copersmith BarbetMegalaima zeylanica (Gmelin, 1788)MN, VH, LIRICC82Asian KoelEudynamys scologacea (Linnaeus, 1758)AH, CIRICC83Southern CoucalCentropus sinensis (stephens, 1815)Mn, MV, CIRICC84Common Hawk CuclooHierococyx varius (vahi, 1797)MVRICC85Southern CoucalAcridotheres tristis (Linnaeus, 1766)AH, HH, CIRICC86Jungle MynaAcridotheres fuscus (Wagler, 1827)CI, HHRICC87Common Crested LarkGalerida cristata (Linnaeus, 1756)AH, HH, CIRICC88Asian Paradise FlycatcherTerpsiphone paradise (Linnaeus, 1758)OfG, CIRICC89White-breasted WaterhenAmaurornis phoenicurus (Pennant, 1769)Mn, MVRICC90Pale-billed FlowerpeckerDicaeum cancolor Jerdon, 1840MVRICC91Thick-billed FlowerpeckerDicaeum cancolor Jerdon, 1840MVRICC92Nigri FlowerpeckerDicaeum cancolor Jerdon, 1840MVRICC93Common HoopoeUpupaepopslinnaeus, 1758GlorestRICC94UburgeledIncent gale (Tickell, 1833) </td <td>78</td> <td>Yellow-footed Green Pigeon</td> <td>Treron phoenicoptera (Latham, 1790)</td> <td>Cl,</td> <td>R</td> <td>LC</td>	78	Yellow-footed Green Pigeon	Treron phoenicoptera (Latham, 1790)	Cl,	R	LC
CapitonidaeMegalaima zeylanica (Gmelin, 1788)Mn, MV, LiRI.C.80Brown Headed BarbetMegalaima haemacephala (Müller, 1776)MV, HH, LiRI.C.81Coppersmith BarbetMegalaima haemacephala (Müller, 1776)MV, HH, LiRI.C.82Asian KoelEudynamys scolopaced (Linnaeus, 1758)AH, ClRI.C.83Southern CoucalCentropus sinensis (Stephens, 1815)Mn, MV, ClRI.C.84Common Hawk CuckooHierococyx varius (Vahi, 1797)MVRI.C.85Common MynaAcridotheres tristis (Linnaeus, 1766)AH, HH, ClRI.C.86Jangle MynaAcridotheres tristis (Linnaeus, 1766)AH, HH, ClRI.C.87Common Krested LarkGalerida cristata (Linnaeus, 1758)OfG, ClRI.C.88Asian Paradise FlycatcherTerpsiphone paradise (Linnaeus, 1758)OfG, ClRI.C.89White-breasted WaterhenAmaurarins phoenicurus (Pennant, 1769)Pu, FwSRI.C.90Pale-billed FlowerpeckerDicaeum erythrorhynchos (Latham, 1790)MV, AccRI.C.91Thick-billed FlowerpeckerDicaeum erythrorhynchos (Latham, 1760)MV, AccRI.C.92Nilgiri FlowerpeckerDicaeum agile (Tickell, 1833)AcRI.C.93Gomon HoopoeJupaepopsLinnaeus, 1758ClRI.C.94UpupaepostFuckupatis, 1764FwRRI.C.95<	79	Blue Rock Pigeon	Columba livia Gmelin, 1789	HH, MV	R	LC
800 Frown Headed Barbet Megolaima peylanica (Gmelin, 1788) Mn, MV, Li R LC 81 Coppersmith Barbet Megolaima hærnacephola (Müller, 1776) MV, HH, Li R LC 82 Asian Koel Eudynamys scolopacea (Linnaeus, 1758) AH, Cl R LC 83 Southern Coucal Centropus sinensis (Stephens, 1815) Mn, MV, Cl R LC 84 Common Hawk Cuckoo Hierococcyx varius (Vahi, 1797) MV R LC 85 Common Myna Acridotheres tristis (Linnaeus, 1766) AH, HH, Cl R LC 85 Common Myna Acridotheres fuscus (Wagler, 1827) O.H R LC 86 Jungle Myna Acridotheres fuscus (Wagler, 1827) O.H R LC 87 Common Crested Lark Galerida cristata (Linnaeus, 1758) OfG, Cl R LC 88 Asian Paradise Flycatcher Terpsiphone paradise (Linnaeus, 1759) Mn, MV Mr Mc 89 White-breasted Waterhen Amaurornis phoenicurus (Pennant, 1769) Pu, FwS R LC 91 Thick-billed Flowerpecker Dicaeum agile (Tickell, 1833) Ac R LC 92 Migri Flowerpecker Dicaeum agile (Tickell, 1833) <td></td> <td>Capitonidae</td> <td></td> <td></td> <td></td> <td></td>		Capitonidae				
81 Coppersmith Barbet Megalaima haemacephala (Müller, 1776) MV, HH, Ll R LC Cuculidae Eudynamys scolopacea (Linnaeus, 1758) AH, Cl R LC 82 Asian Koel Eudynamys scolopacea (Linnaeus, 1758) AH, Cl R LC 83 Southern Coucal Centropus sinensis (Stephens, 1815) Mn, MV, Cl R LC 84 Common Hawk Cuckoo Hierococcyx varius (Vahi, 1797) MV R LC 85 Common Myna Acridotheres tristis (Linnaeus, 1766) AH, HH, Cl R LC 86 Jungle Myna Acridotheres fuscus (Wagler, 1827) CJ, HH R LC 87 Common Crested Lark Galerida cristota (Linnaeus, 1758) OfG, Cl R LC 88 Asian Paradise Flycatcher Terpsiphone paradise (Linnaeus, 1759) Mn, MV Local min- grant LC 89 White-breasted Waterhen Amauroris phoenicurus (Pennant, 1769) Pu, FwS R LC 90 Pale-billed Flowerpecker Dicaeum aguile (Tickell, 1833) Ac R LC 91 Thick-billed Flowerpecker Dicaeum concolor Jerdon, 1840 MV R LC 92 Nilgiri Flowerpecker Dicaeum concolor Jerdon, 1840	80	Brown Headed Barbet	Megalaima zeylanica (Gmelin, 1788)	Mn, MV, Ll	R	LC
CucuidaeCucuidaeCucuidaeCucuidae82Asian KoelEudynamys scolapaced (Linnaeus, 1758)AH, ClRI.C83Southern CoucalCentropus sinensis (Stephens, 1815)Mn, MV, ClRI.C84Common Hawk CuckooHierococcyx varius (Vahi, 1797)MVRI.C85Common MynaAcridotheres tristis (Linnaeus, 1766)AH, HH, ClRI.C86Jungle MynaAcridotheres tristis (Linnaeus, 1766)AH, HH, ClRI.C87Common Crested LarkGalerida cristara (Linnaeus, 1758)OfG, ClRI.C88Asian Paradise FlycatcherTerpsiphone paradise (Linnaeus, 1759)Mn, MVLocal min- grantI.C88Asian Paradise FlycatcherTerpsiphone paradise (Linnaeus, 1759)Mn, MVLocal min- grantI.C90Pale-billed FlowerpeckerDicaeum erythrorhynchos (Latham, 1790)MV, AcRI.C91Thick-billed FlowerpeckerDicaeum agile (Tickell, 1833)AcRI.C92Nilgir FlowerpeckerDicaeum agile (Tickell, 1833)AcRI.C93Common HoopoeUpupaepapsLinnaeus, 1758ClRI.C94Utel GrebeTachybaptus ruficollis (Pallas, 1764)FwRRI.C95Baya WaseerPloceusphillppinus(Linnaeus, 1758ClRI.C94Utitle GrebeTachybaptus ruficollis (Pallas, 1764)FwRRI.C95Baya WaseerPloceusphill	81	Coppersmith Barbet	Megalaima haemacephala (Müller, 1776)	MV, HH, LI	R	LC
82Asian KoelEudynamys scolopacea (Linnaeus, 1758)AH, ClRILC83Southern CoucalCentropus sinensis (Stephens, 1815)Mn, MV, ClRILC84Common Hawk CuckooHierococcyx varius (Vahi, 1797)MVRILC85Common MynaAcridotheres tristis (Linnaeus, 1766)AH, HH, ClRILC86Jungle MynaAcridotheres tristis (Linnaeus, 1756)AH, HH, ClRILC7AlaudidaeAcridotheres tristis (Linnaeus, 1758)OfG, ClRILC87Common Crested LarkGalerida cristata (Linnaeus, 1758)OfG, ClRILC88Asian Paradise FlycatcherTerpsiphone paradise (Linnaeus, 1758)Mn, MVMagnattILC89White-breasted WaterhenArmaurornis phoenicurus (Pennant, 1769)Put, FwSRILC90Pale-billed FlowerpeckerDicaeum erythrorhynchos (Lathan, 1790)MV, AcRILC91Thick-billed FlowerpeckerDicaeum concolor Jerdon, 1840MVRILC92Nilgri FlowerpeckerDicaeum concolor Jerdon, 1840MVRILC93Common HoopoUpupaepopsLinnaeus, 1758)ClRILC94Little GrobeTochypaptus rufcollis (Pallas, 1764)FwRRILC95Baya WeaverPloceusphillippinus(Linnaeus, 1766)CoRILC95Baya WeaverPloceusphillippinus(Linnaeus, 1766)CoRILC96Common Buttonquail<		Cuculidae				
83Southern CoucalCentropus sinensis (Stephens, 1815)Mn, MV, ClRLC84Common Hawk CuckooHierococcyx varius (Vahi, 1797)MVRLC5Sturridae	82	Asian Koel	Eudynamys scolopacea (Linnaeus, 1758)	AH, CI	R	LC
84Common Hawk CuckooHierococcyx varius (Vahi, 1797)MVRILCSturnidae<	83	Southern Coucal	Centropus sinensis (Stephens, 1815)	Mn, MV, Cl	R	LC
SturnidaeSturnidaeInternationalSturnidae85Common MynaAcridotheres fristis (Linnaeus, 1766)AH, HH, ClRLC86Jungle MynaAcridotheres fuscus (Wagler, 1827)Cl, HHRLCAlaudidaeInternational ControlInternational ControlInternational ControlInternational Control87Common Crested LarkGalerida cristata (Linnaeus, 1758)OfG, ClRLC88Asian Paradise FlycatcherTerpsiphone paradise (Linnaeus, 1759)Mn, MVLocal mi- grantLC88Asian Paradise FlycatcherTerpsiphone paradise (Linnaeus, 1759)Mn, MVLocal mi- grantLC89White-breasted WaterhenAmauromis phoenicurus (Pennant, 1769)Pu, FwSRLC90Pale-billed FlowerpeckerDicaeum angle (Tickell, 1833)AcRLC91Thick-billed FlowerpeckerDicaeum concolor Jerdon, 1840MVRLC92Nilgiri FlowerpeckerDicaeum concolor Jerdon, 1840MVRLC93Common HoopoeUpupaepopsLinnaeus, 1758ClRLC94Little GrebeTachyboptus ruficollis (Pallas, 1764)FwRRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC96Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, Ts, CoRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian S	84	Common Hawk Cuckoo	Hierococcyx varius (Vahi, 1797)	MV	R	LC
85Common MynaAcridotheres tristis (Linnaeus, 1766)AH, HH, ClRLC86Jungle MynaAcridotheres fuscus (Wagler, 1827)Cl, HHRLCAlaudidae		Sturnidae				
86 Jungle Myna Acridotheres fuscus (Wagler, 1827) Cl, HH R LC Alaudidae Common Crested Lark Galerida cristata (Linnaeus, 1758) OfG, Cl R LC 87 Common Crested Lark Galerida cristata (Linnaeus, 1758) OfG, Cl R LC 88 Asian Paradise Flycatcher Terpsiphone paradise (Linnaeus, 175) Mn, MV Local mi- grant LC 88 Asian Paradise Flycatcher Terpsiphone paradise (Linnaeus, 175) Mn, MV Local mi- grant LC 88 Milite-breasted Waterhen Amaurornis phoenicurus (Pennant, 1769) Pu, FwS R LC 90 Pale-billed Flowerpecker Dicaeum erythrorhynchos (Latham, 1790) MV, Ac R LC 91 Thick-billed Flowerpecker Dicaeum agile (Tickell, 1833) Ac R LC 92 Nilgiri Flowerpecker Dicaeum concolor Jerdon, 1840 MV R LC 93 Common Hoopoe UpupaepopsLinnaeus, 1758 Cl R LC 94 Little Grebe Tachybaptus ruficollis (Pallas, 1764) FwR R LC 95 Ba	85	Common Myna	Acridotheres tristis (Linnaeus, 1766)	AH, HH, Cl	R	LC
Alaudidae Galerida cristata (Linnaeus, 1758) OfG, Cl R LC 87 Common Crested Lark Galerida cristata (Linnaeus, 1758) OfG, Cl R LC 88 Asian Paradise Flycatcher Terpsiphone paradise (Linnaeus, 175) Mn, MV Local mi- grant LC 88 Asian Paradise Flycatcher Terpsiphone paradise (Linnaeus, 175) Mn, MV Local mi- grant LC 88 Mhite-breasted Waterhen Amaurornis phoenicurus (Pennant, 1769) Pu, FwS R LC 90 Pale-billed Flowerpecker Dicaeum arythrorhynchos (Latham, 1790) MV, Ac R LC 91 Thick-billed Flowerpecker Dicaeum arythrorhynchos (Latham, 1790) MV Ac R LC 92 Nilgiri Flowerpecker Dicaeum arythrorhynchos (Latham, 1790) MV R LC 93 Common Hoope UpupaepopsLinnaeus, 1758 Cl R LC 94 Little Grebe Tochybaptus ruficollis (Pallas, 1764) FwR R LC 94 Little Grebe Poloceusphilippinus(Linnaeus, 1766) Co R LC 95 Baya Weaver	86	Jungle Myna	Acridotheres fuscus (Wagler, 1827)	СІ, НН	R	LC
87 Common Crested Lark Galerida cristata (Linnaeus, 1758) OfG, Cl R LC Monarchinae		Alaudidae				
Monarchinae Image: Constraint of the second sec	87	Common Crested Lark	Galerida cristata (Linnaeus, 1758)	OfG, Cl	R	LC
88 Asian Paradise Flycatcher Terpsiphone paradise (Linnaeus, 175) Mn, MV Local mi- grant LC 89 White-breasted Waterhen Amaurornis phoenicurus (Pennant, 1769) Pu, FwS R LC 90 Pale-billed Flowerpecker Dicaeum erythrorhynchos (Latham, 1790) MV, Ac R LC 91 Thick-billed Flowerpecker Dicaeum erythrorhynchos (Latham, 1790) MV, Ac R LC 92 Nilgiri Flowerpecker Dicaeum agile (Tickell, 1833) Ac R LC 93 Common Hoopoe UpupaepopsLinnaeus, 1758 Cl R LC 94 Little Grebe Tachybaptus ruficollis (Pallas, 1764) FwR R LC 94 Little Grebe Tachybaptus ruficollis (Pallas, 1764) FwR R LC 95 Baya Weaver Ploceusphilippinus(Linnaeus, 1766) Co R LC 95 Baya Weaver Ploceusphilippinus(Linnaeus, 1766) Co R LC 96 Common Buttonquail Turnix suscitator (Gmelin, 1789) OfG, Ts, Co R LC 97 Jungle Owlet Glaucidium rad		Monarchinae				
NalidaeNalidaeNetworkNetworkNetworkNetworkNetwork89White-breasted WaterhenAmaurornis phoenicurus (Pennant, 1769)Pu, FwSRLC90Pale-billed FlowerpeckerDicaeum arythrorhynchos (Latham, 1790)MV, AcRLC91Thick-billed FlowerpeckerDicaeum arythrorhynchos (Latham, 1790)MV, AcRLC92Nilgiri FlowerpeckerDicaeum arythrorhynchos (Latham, 1790)MVRLC93Common HoopoeDicaeum concolor Jerdon, 1840MVRLC94UpupidaeIIII95Common HoopoeUpupaepopsLinnaeus, 1758ClRLC94Hitle GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC96Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, Ts, CoRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian Scops OwlOtus bakkamoena Pennant, 1769OfgRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC99Pheasant-tailed JacanaApdrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC	88	Asian Paradise Flycatcher	Terpsiphone paradise (Linnaeus, 175)	Mn, MV	Local mi- grant	LC
89White-breasted WaterhenAmauromis phoenicurus (Pennant, 1769)Pu, FwSRLCDicaeidaeIncenticationIncenticationIncenticationIncenticationIncentication90Pale-billed FlowerpeckerDicaeum erythrorhynchos (Latham, 1790)MV, AcRLC91Thick-billed FlowerpeckerDicaeum agile (Tickell, 1833)AcRLC92Nilgiri FlowerpeckerDicaeum concolor Jerdon, 1840MVRLC93Common HoopoeUpupaepopsLinnaeus, 1758ClRLC94Little GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC96Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, TsRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian Scops OwlOtus bakkamoena Pennant, 1769OfgRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC		Rallidae				
DicaeidaeDicaeidaeIntervent of the section of t	89	White-breasted Waterhen	Amaurornis phoenicurus (Pennant, 1769)	Pu, FwS	R	LC
90Pale-billed FlowerpeckerDicaeum erythrorhynchos (Latham, 1790)MV, AcRLC91Thick-billed FlowerpeckerDicaeum agile (Tickell, 1833)AcRLC92Nilgiri FlowerpeckerDicaeum concolor Jerdon, 1840MVRLC93Common HoopoeUpupaepopsLinnaeus, 1758ClRLC94Little GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC96Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, TsRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian Scops OwlOtus bakkamoena Pennant, 1769OfgRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC99Netasant-tailed JacanaOn functional filter		Dicaeidae				
91Thick-billed FlowerpeckerDicaeum agile (Tickell, 1833)AcRLC92Nilgiri FlowerpeckerDicaeum concolor Jerdon, 1840MVRLC93UpupidaeIIII93Common HoopoeUpupaepopsLinnaeus, 1758ClRLC94Ititle GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC94Little GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC96Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, TsRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian Scops OwlOtus bakkamoena Pennant, 1769OfgRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC99NatidaeOn the tain the	90	Pale-billed Flowerpecker	Dicaeum erythrorhynchos (Latham, 1790)	MV, Ac	R	LC
92Nilgiri FlowerpeckerDicaeum concolor Jerdon, 1840MVRLCUpupidae <td>91</td> <td>Thick-billed Flowerpecker</td> <td>Dicaeum agile (Tickell, 1833)</td> <td>Ac</td> <td>R</td> <td>LC</td>	91	Thick-billed Flowerpecker	Dicaeum agile (Tickell, 1833)	Ac	R	LC
UpupidaeImage: common HoopoeUpupaepopsLinnaeus, 1758ClRLC93Common HoopoeUpupaepopsLinnaeus, 1758ClRLC94PodicipedidaeTachybaptus ruficollis (Pallas, 1764)FwRRLC94Little GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC96Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, TsRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian Scops OwlOtus bakkamoena Pennant, 1769OfgRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)CI, FwSRLC94Institute PaceCoFunction PaceFunction PaceFunction Pace	92	Nilgiri Flowerpecker	Dicaeum concolor Jerdon, 1840	MV	R	LC
93Common HoopoeUpupaepopsLinnaeus, 1758ClRLC94PodicipedidaeTachybaptus ruficollis (Pallas, 1764)FwRRLC94Little GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLC96Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, TsRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian Scops OwlOtus bakkamoena Pennant, 1769OfgRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)CI, FwSRLC94AnatidaeIndian Scops OwlPuor target for the first the first target for the firs		Upupidae				
PodicipedidaeIndext and the second secon	93	Common Hoopoe	UpupaepopsLinnaeus, 1758	CI	R	LC
94Little GrebeTachybaptus ruficollis (Pallas, 1764)FwRRLC95Ploceidae		Podicipedidae				
PloceidaeImage: Ploce of the state of the sta	94	Little Grebe	Tachybaptus ruficollis (Pallas, 1764)	FwR	R	LC
95Baya WeaverPloceusphilippinus(Linnaeus, 1766)CoRLCTurnicidae </td <td></td> <td>Ploceidae</td> <td></td> <td></td> <td></td> <td></td>		Ploceidae				
TurnicidaeImage: Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, TsRLC96StrigidaeImage: Common ButtonquailTurnix suscitator (Gmelin, 1789)OfG, TsRLC97Jungle OwletGlaucidium radiatum (Tickell, 1833)OfG, Ts, CoRLC98Indian Scops OwlOtus bakkamoena Pennant, 1769OfgRLCJacanidaeImage: Common ButtonquaitHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLC99Pheasant-tailed JacanaHydrophasianus chirurgus (Scopoli, 1786)Cl, FwSRLCImage: Image: Ima	95	Baya Weaver	Ploceusphilippinus(Linnaeus, 1766)	Co	R	LC
96 Common Buttonquail Turnix suscitator (Gmelin, 1789) OfG, Ts R LC 5trigidae Image of Glaucidium radiatum (Tickell, 1833) OfG, Ts, Co R LC 97 Jungle Owlet Glaucidium radiatum (Tickell, 1833) OfG, Ts, Co R LC 98 Indian Scops Owl Otus bakkamoena Pennant, 1769 Ofg R LC 99 Pheasant-tailed Jacana Hydrophasianus chirurgus (Scopoli, 1786) Cl, FwS R LC 99 Anatidae Image of the Chirurgus (Scopoli, 1786) Cl, FwS R LC		Turnicidae				
Strigidae Image Image 97 Jungle Owlet Glaucidium radiatum (Tickell, 1833) OfG, Ts, Co R LC 98 Indian Scops Owl Otus bakkamoena Pennant, 1769 Ofg R LC Jacanidae Image Image Image Image Image 99 Pheasant-tailed Jacana Hydrophasianus chirurgus (Scopoli, 1786) Cl, FwS R LC Anatidae Image Image Image Image Image Image	96	Common Buttonquail	Turnix suscitator (Gmelin, 1789)	OfG, Ts	R	LC
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98 Indian Scops Owl Otus bakkamoena Pennant, 1769 Ofg R LC Jacanidae	97	Jungle Owlet	Glaucidium radiatum (Tickell, 1833)	OfG, Ts, Co	R	LC
Jacanidae Image: Scopoli, 1786 Image: Scopoli, 1786 99 Pheasant-tailed Jacana Hydrophasianus chirurgus (Scopoli, 1786) Cl, FwS R LC Anatidae Image: Scopoli, 1786	98	Indian Scops Owl	Otus bakkamoena Pennant, 1769	Ofg	R	LC
99 Pheasant-tailed Jacana Hydrophasianus chirurgus (Scopoli, 1786) Cl, FwS R LC Anatidae		Jacanidae				
Anatidae Contraction of the Cont	99	Pheasant-tailed Jacana	Hydrophasianus chirurgus (Scopoli, 1786)	Cl, FwS	R	LC
		Anatidae				
100 Lesser Whistling Duck Dendrocygna javanica (Horsfield, 1821) FwR R LC	100	Lesser Whistling Duck	Dendrocygna javanica (Horsfield, 1821)	FwR	R	LC
Falconidae		Falconidae				
101 Common Kestrel Falco tinnunculus Linnaeus, 1758 OfG WV LC	101	Common Kestrel	Falco tinnunculus Linnaeus, 1758	OfG	WV	LC

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Abbreviations: Least Concern= LC, Near Threatened = NT. Source: BirdLife International (2014). Habitat abbreviations: Malvan: MgS - Mangrove swamps; Tc - Tidal creek; RS - Rocky shore; SS - Sandy shore; Ri - Rocky islands; FwR - Freshwater reservoir. Bagayat: HH - Human Habitation; CI - Cultivation; PF - Paddy Fields; OfG - Open forest Grasslands; AH - All Habitat; MV - Mixed vegetation; Ts - Thorn scrub; FwS -Freshwater stream; Ac - Acacia auriculiformis; Pu - Pundanus spp.; Mn - Mangifera indica; FcB - Ficus bengalensis; Gc - Garcinia indica; Bm - Bombax malabaricum; Co - Cocos nucifera; LI - Loranthus longiflorus



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List Category, 100 species were Least Concern while one species was found to be Near Threatened (Malabar Pied Hornbill). Maximum number of species were found in mixed vegetation (14.2%) habitat followed by open forest grassland (11.8%), cultivation (10.4%), thorn scrub (7.5%) and mangroves (7.5%) (Fig. 2). The Bagayat has fresh water stream covered with dense *Pundanus* sp. vegetation which provides a refuge to many species during the afternoon. Species such as Little Cormorant, Yellow Wagtail, White-breasted Water-hen, Indian Pond Heron were observed continuously in December and February in the freshwater streams of Bagayat.

The Malabar Pied Hornbill was observed in 8 to 10 numbers in all seasons every day on Coconut, Mango and Banyan tree in Bagayat and surrounding areas. The reason for occurring in good numbers may be due to tall and fruiting trees. They were also observed on Ficus bengalensis many times feeding on the fig fruit. The roosting site for White-breasted Water-hen was Pundanus vegetation while that of Little Cormorant and Pond Heron was found on Semecarpus anacardium along the streams of Bagayat as they preferred tall trees. Nesting of Tickell's Blue Flycatcher was observed in drinking water well feeding their young ones with Honeybee. Red-rumped Swallow nesting was confirmed by observing them in carrying nest-building mud in their beak. Nesting of Baya Weaver was also seen on coconut trees.

Maximum number of birds was observed during the post monsoon season on fruiting trees. Extensive

Table	2. :	Species	distribution	in	their	respective	order
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	Orders	Number of species	Percentage (%)
1	Accipitriformes	6	5.94
2	Anseriformes	1	0.99
3	Bucerotiformes	3	2.97
4	Charadriiformes	8	7.92
5	Columbiformes	4	3.96
6	Coraciiformes	6	5.94
7	Cuculiformes	3	2.97
8	Falconiformes	1	0.99
9	Galliformes	2	1.98
10	Gruiformes	1	0.99
11	Passiformes	45	44.55
12	Pelecaniformes	10	9.90
13	Piciformes	4	3.96
14	Podicipediformes	1	0.99
15	Psittaciformes	3	2.97
16	Strigiformes	2	1.98
17	Suliformes	1	0.99
	Total	101	100.0

deforestation by slash and burn for plantations in Bagayat (Image 16) whereas mangroves cutting into Malvan town (Image 15) were the major threats observed in the study area. The forest area around Bagayat is cleared for plantations of cashew, mango and agricultural land. Personal observation has showed that

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Image 2. Little Cormorant roosting site



Image 3. Young ones of Tickell's Blue Flycatcher



Image 4. Tickell's Blue Flycatcher



Image 5. Nesting of Red-rumped Swallow



Image 6. Red-rumped Swallow with mud



Image 7. Brown-headed Barbet





Image 8. Oriental Magpie Robin



Image 9. Vernal hanging Parrot



Image 10. Malabar Pied Hornbill





Image 12. Common Tailor Bird



Image 13. Lesser Goldenback



Image 14. Wire-tailed Swallow

Image 11. Grey Heron



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Image 15. Mangrove deforestation



Image 16. Slash and burn for plantations

the population of crows has increased within the two years study period in Bagayat which may be due to the increased anthropogenic activities. Besides, unwanted domestic as well as household waste is deposited in to the stream of Bagayat by local people causing pollution & water logging. During Ganesh visarjan, Ganesh idol immersion is done in Bagayatwadi stream leading to pollution. Species such as the Asian Paradise Flycatcher, Common Hoopoe, Pied Kingfisher were observed once only in the winter season. Increasing household development by cutting off of the forest cover is on the rise resulting in destruction of habitats for different species. In recent year's activities such as urbanization, construction of houses and shops, dumping wastes in stream and estuaries etc is on the rise in Malvan Taluka. Moreover, tourism has increased in Malvan Taluka where large numbers of national and international tourists visit every year thereby increasing pollution and population. A temple called Bharadidevi situated in Angnewadi 4km

away from Bagayatwadi is famous for its tourism where a large number of tourists visit every year in the month of February. These increasing developmental activities and disturbances may cause further effects on avifaunal diversity in future.

CONCLUSION

This is the first documentation on birds from Bagayatwadi Village and Malvan Town as no other records have been published yet. The study area shows a richness for a variety of birds inhabiting the area. Considering the impact of anthropogenic activities and increasing unplanned household development, long term changes in population and abundance of the birds should be monitored in the study area (Mayura Khot pers. obs.) to prepare complete checklist of birds as habitat destruction & pollution plays a major role in the decline of species (Reddy et al. 2014). Activities such as burning forests for plantations and deforestation of

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mangroves a detailed study is required to find out the impact on the roosting of birds. As crows are indicators of pollution (Pachlore & Chandrakar 2011), monitoring the population or a detailed study of crows is needed in Bagayat which will help in understanding the increasing population of crows in the particular area. As a result of healthy habitat conditions for threatened species like Malabar Pied Hornbill, long term studies could be planned for population structure and behavior studies so as to assist in conservation of this species in other areas of Konkan. Mangrove areas in Malvan Taluka need to be protected as they play an important role in breeding and nursery ground for large number of birds. Considering the above aspects and to overcome these threats there is need for awareness in coastal village communities where the study area needs to be protected. The data generated in this paper can be used as baseline data for management and conserving population of existing species.

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