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Avifaunal Diversity of Tamkarada Forest, Near Malegaon Tehsil of Washim district

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Abstract: ***Human dependence on biodiversity is absolute. It is very important to document the bio-diversity in order to conserve it. Present study was conducted as a part to monitor bio-diversity of Washim district. In present study avifaunal diversity is documented from Tamkarada, forest of Washim district.***

Keywords: Avifauna, Biodiversity, Washim District, Conservation.

1. Introduction

Birds are often common residents of the ecosystems and they have been considered as an indicator species of inhabited areas (Blair, 1999). Monitoring birds diversity of given area gives considerable idea of forest type. West Vidarbha region comprised by the five districts namely Akola, Amravati, Buldhana, Washim and Yeotmal. In this region forest is dry deciduous types.Majorities of these forests are heavily degraded due to low fertility coupled with low rainfall. The soil is mostly classified as black cotton soil, brown soil, and loamy soil (State of Forest Report, 2009). Washim district has diverse range of habitats like wetland of artificially created dams, grass land of KaranjaSohol, and forest land Katepurna wild life sanctuary. Tamkarada is located in Malegaon tehsil of Washim district (Coordinates: 20°14'28"N 76°52'16"E). This place is famous for Rushi baba temple. Every Monday many peoples gather here to worship lord Shiva. This is unprotected area of Patur forests surrounded by agriculture farms. When authors first visited this place, they were amazed by the bio-diversity here. As part of documenting bio-diversity authors conducted filed surveys to monitor avian diversity of this region from August 2011 to April 2015, at least once in month. Pawar et al. (2005) reported 74 species of birds in and around Yedshi lake, Mangrulpir, Washim district (MS), Kedar et al, (2008) recorded 74 species of birds in Rishi and Zedshi lake of Washim district (MS). Some 21 species of snakes are reported from this forest (Ingle 2014). In May 2013 Indian rock python was rescued from different area of same forest from fishing nets (Ingle 2014). Kedar& Patil (2005) recorded 60 birds species from Rishi lake, Karnja(lad) of Washim district.D. G. Bhadange studied 30 species of medicinal plants from Washim and Akola districts (Bhadange 2011). Though various workers have documented biodiversity of Washim district in various area many parts of districts are untouched as far as documenting biodiversity is concerned.

2. Methods

Extensive survey of Tamkarada hills were conducted during August 2012 to April 2015 by the author either singly or in group, opportunistically. The site was visited every month around the year. Many times surveys were carried more than once in some month by one author or in group. The surveys were started early in the morning and lasted till late in the afternoon sometimesup to 4-5pm. When the sight was visited late in afternoon, surveys lasted for late in the evening, especially in summer. The birds were observed with Nikon 10×50 binoculars and identified with the help of field guides (Ali 2009 and Grimmett et al. 2010). The check list was prepared according to standardized system followed by Bombay Natural History Society elaborated in Buceros Vol. 6, No. 1 (2001) by RanjitMankandan and AasheeshPittie.

3. Results and discussion

Total 92 species of birds were identified by the authors during August 2012 to April 2015. 91 species of identified species represented 40 families from 14 orders. Order Passeriformes is highest represented order comprising 43 birds from 18 families. Checklist of birds is given in chart 1; chart 2 explains orderwise distribution of families and number of bird's species.

Chart 1: Check list of birds

Sr.No.	Common name	*Scientific name*	Family	Order
1	Little cormorant	*Phalacrocoraxniger*	Phalacrocoracidae	Pelecaniforme
2	Little egret	*Egrettagarzetta*	Ardeidae	Ciconiiformes
3	Cattle egret	*Bubulcus ibis*	Ardeidae	Ciconiiformes
4	Indian Pond heron	*Ardeolagrayii*	Ardeidae	Ciconiiformes
5	White-necked Stork	*Ciconiaepiscopus*	Ciconiidae	Ciconiiformes
6	Black shouldered kite	*Elanuscaeruleus*	Accipitridae	Falconiformes
7	Black kite	*Milvusmigrans*	Accipitridae	Falconiformes
8	Brahminy kite	*Hiliasturindus*	Accipitridae	Falconiformes
9	Crested Serpent-Eagle	*Spilornischeela*	Accipitridae	Falconiformes

10	Shikra	*Accipiter badius*	Accipitridae	Falconiformes
11	White eye buzzard	*Butasturteesa*	Accipitridae	Falconiformes
12	Common Kestrel	*Falco tinnunculus*	Falconidae	Falconiformes
13	Grey Francolin	*Francolinuspondicerianus*	Phasianidae	Galliformes
14	Rain quail	*Coturnixcoromandelica*	Phasianidae	Galliformes
15	Indian peafowl	*Pavocristatus*	Phasianidae	Galliformes
16	Red-wattled lapwing	*Vanellus indicus*	Charadriidae	Charadriiform
17	Yellow leged green pigeon	*Treronphoenicoptera*	Columbidae	Columbiforme
18	Blue Rock Pigeon	*Columba livia*	Columbidae	Columbiforme
19	Eurasian collared dove	*Streptopeliadecaocto*	Columbidae	Columbiforme
20	Red Collared-Dove	*Streptopeliatranquebarica*	Columbidae	Columbiforme
21	Spotted dove	*Streptopeliachinensis*	Columbidae	Columbiforme
22	Little Brown Dove	*Streptopeliasenegalensis*	Columbidae	Columbiforme
23	Rose ring parkeet	*Psittaculakrameri*	Psittacidae	Psittaciformes
24	Plum headed parkeet	*Psittaculacyanocephala*	Psittacidae	Psittaciformes
25	Alexandrine parkeet	*Psittaculaeupatria*	Psittacidae	Psittaciformes
26	Greater coucal	*Centropussinensis*	Cuculidae	Cuculiformes
27	Asian koel	*Eudynamysscolopacea*	Cuculidae	Cuculiformes
28	Drongo Cuckoo	*Surniculuslugubris*	Cuculidae	Cuculiformes
29	Asian Koel	*Eudynamysscolopacea*	Cuculidae	Cuculiformes
30	Barn owl	*Tyto alba*	Tytonidae	Strigiformes
31	Collared Scops-Owl	*Otusbakkamoena*	Strigidae	Strigiformes
32	Eurasian eagle owl	*Bubo bubo*	Strigidae	Strigiformes
33	Brown Fish-Owl	*Ketupazeylonensis*	Strigidae	Strigiformes
34	Jungle Owlet	*Glaucidiumradiatum*	Strigidae	Strigiformes
35	Spotted owlet	*Athenebrama*	Strigidae	Strigiformes
36	Common Indian night jar	*Caprimulgusasiaticus*	Caprimulgidae	Caprimulgifor
37	House Swift	*Apusaffinis*	Apodidae	Apodiformes
38	White-breasted Kingfisher	*Halcyon smyrnensis*	Alcedinidae	Coraciiformes
39	Black-capped Kingfisher	*Halcyon pileata*	Alcedinidae	Coraciiformes
40	Lesser Pied Kingfisher	*Cerylerudis*	Alcedinidae	Coraciiformes
41	Small Bee-eater	*Meropsorientalis*	Meropidae	Coraciiformes
42	Indian roler	*Coraciasbenghalensis*	Coraciidae	Coraciiformes
43	Common hoopoe	*Upupaepops*	Upupidae	Coraciiformes
44	Indian gray hornbill	*Ocycerosbirostris*	Bucerotidae	Coraciiformes
45	Cooper smith barbet	*Megalaimahaemacephala*	Capitonidae	Piciformes
46	Common Woodshrike	*Tephrodornispondicerianu*	Capitonidae	Piciformes
47	Yellow-fronted Pied Woodpecker	*Dendrocoposmahrattensis*	Picidae	Piciformes
48	Common Golden-backed Woodpecker	*Dinopiumjavanense*	Pittidae	Piciformes
49	Indian Pitta	*Pitta brachyuran*	Pittidae	Piciformes
50	Sykes's Crested Lark	*Galerida deva*	Alaudidae	Passeriformes
51	Wire tail swallow	*Hirundosmithii*	Hirundinidae	Passeriformes
52	Red rumped swallow	*Hirundodaurica*	Hirundinidae	Passeriformes
53	yellow wagtail	*Motacillaflava*	Motacillidae	Passeriformes
54	white wagtail	*Motacilla alba*	Motacillidae	Passeriformes
55	Large Cuckoo-Shrike	*Coracinamacei*	Campephagidae	Passeriformes
56	Small minivet	*Pericrocotuscinnamomeus*	Campephagidae	Passeriformes
57	Red vented bulbul	*Pycnonotuscafer*	Pycnonotidae	Passeriformes
58	Common iora	*Aegithinatiphia*	Irenidae	Passeriformes
59	Bay backed shrike	*Laniusvittatus*	Laniidae	Passeriformes
60	Rufous-backed Shrike	*Laniusschach*	Laniidae	Passeriformes
61	Black drongo	*Dicrurusmacrocercus*	Dicruridae	Passeriformes
62	White bellied drongo	*Dicruruscaerulescens*	Dicruridae	Passeriformes
63	Indian treepie	*Dendrocittavagabunda*	Corvidae	Passeriformes
64	house crow	*Corvussplendens*	Corvidae	Passeriformes
65	Jungle Crow	*Corvusmacrorhynchos*	Corvidae	Passeriformes
66	Eurasian Golden Oriole	*Oriolusoriolus*	Oriolidae	Passeriformes
67	Brahminy starling	*Sturnuspagodarum*	Sturnidae	Passeriformes
68	Common Starling	*Sturnus vulgaris*	Sturnidae	Passeriformes
69	Asian pied starling	*Sturnus contra*	Sturnidae	Passeriformes
70	Common myna	*Acridotherestristis*	Sturnidae	Passeriformes
71	Oriental magpie robin	*Copsychussaularis*	Muscicapidae	Passeriformes
72	Indian robin	*Saxicoloidesfulicata*	Muscicapidae	Passeriformes
73	Pied Bushchat	*Saxicolacaprata*	Muscicapidae	Passeriformes
74	Common stone chat	*Saxicolatorquata*	Muscicapidae	Passeriformes
75	Asian Paradise-Flycatcher	*Terpsiphoneparadisi*	Muscicapidae	Passeriformes
76	White-browed Fantail-Flycatcher	*Rhipiduraaureola*	Muscicapidae	Passeriformes

77	Black redstart	*Phoenicorusochruros*	Muscicapidae	Passeriformes
78	common babbler	*Turdoidescaudatus*	Muscicapidae	Passeriformes
79	Jungle Babbler	*Turdoidesstriatus*	Muscicapidae	Passeriformes
80	Common tailor bird	*Orthotomussutorius*	Muscicapidae	Passeriformes
81	Ashy prinia	*Priniasocialis*	Muscicapidae	Passeriformes
82	Plain Prinia	*Priniainornata*	Muscicapidae	Passeriformes
83	Great tit	*Parus major*	Paridae	Passeriformes
84	Purple sun bird	*Nectariniaasiatica*	Nectarinidae	Passeriformes
85	Oriental white eye	*Zosteropspalpebrosus*	Zosteropidae	Passeriformes
86	Creasted bunting	*Melophuslathami*	Emberizidae	Passeriformes
87	Red munia	*Amandavaamandava*	Estrildidae	Passeriformes
88	White-throated Munia	*Lonchuramalabarica*	Estrildidae	Passeriformes
89	Spotted Munia	*Lonchurapunctulata*	Estrildidae	Passeriformes
90	paddy field pipit	*Anthusrufulus*	Estrildidae	Passeriformes
91	House sparrow	*Passer domesticus*	Passeridae	Passeriformes
92	Baya weaver	*Ploceusphilippinus*	Passeridae	Passeriformes

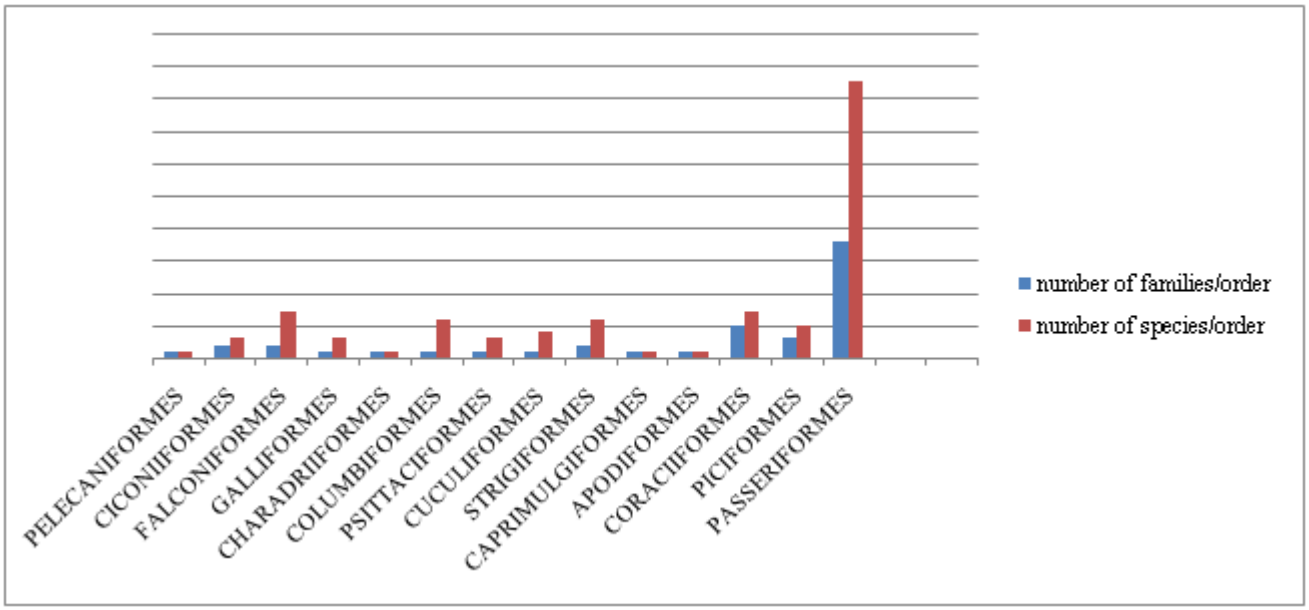

Chart 2: order vise distribution of families and species.

The Passeriformes is the largest and most diverse order of birds. The Passeriforrnes (or 'passerine' birds) are synonymous with what are commonly known as "perching birds". This is the order which has largest share of birds in our study too comprising of 18 families in total 40 families i.e. 45% of total families and 43 of 92 birds species around 47.25%. Raptor birds are placed in two families i.e. Falconiformes and Strigiformes, both are found in this study in good numbers. Falconiformes, order of diurnal birds of prey comprise 7 species belonging to 2 families. Strigiformesthe order of nocturnal birds mainly owls and owlets is represented by 6 species of 2 families. The birds of prey represented 10% of total families and 14.28% of total species, of our study result. This is important for the fact the presence of raptors birds in good numbers indicate better availability of food, implying that the given area is indeed very rich in biodiversity. In May 2012 we sighted Indian pitta, it was encouraging as these birds are thought to inhabit in coastal areas only and is summer migrant in central India. Black capped kingfisher, which is mainly inhabitant of coastal area, was also sighted once during study in March 2013. The beautiful Asian paradise flycatcher and Creasted bunting were also sighted many times during study period, these are too summer migratory birds.

Though, there seems no immediate threat to this forest habitat, over grazing is emerging as problem. Our study has shown that this forest land is very rich in biodiversity and should be conserved. Increased pilgrims spreading waste everywhere in forest and increased level of plastics can cause permanent damage to soil. Apart from focusing on threats to biodiversity, it is very important to document it. One should know what really exist and then planning for conservation can be made. Birds are friends of farmers as they eat insect pests and keep check on population of reptiles and small mammals. For sustainable agriculture, it is very important to conserve biodiversity of birds.

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