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Avifaunal diversity and status of Kaggaladu Bird Sanctuary of Tumkur District, Karnataka

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Abstract: ***The present study was carried out to identify avifaunal diversity and population status of at Kaggaladu Bird Sanctuary of Tumkur district. A total of 48 species were identified belonging to 18 families and 12 orders were recorded in the study area. Among the avifauna 28 (58.33%) resident, 05 (10.42%) migratory and15 (31.25%) resident-migratory birds were recorded. More species were sighted in order Ciconiformes Passeriformes, followed by Gruiformes, Anseriformes and Coraciiformes were recorded.***

Keywords: Kaggaladu, bird sanctuary, avifauna, diversity, status, conservation

I. INTRODUCTION

Diversity of avifauna is one of the most important ecological indicators to evaluate the quality of habitats. Most of the birds are play a useful role in the control of insect pests in agricultural and acts as scavengers useful to mankind. Now a days, avifaunal diversity has been decreasing due to human disturbances which leads to destruction of their habitats. Therefore, detail study on avifauna and their ecology is important to protect them. India supports 1300 plus birds species belonging to 16 orders. Out of these, 900 plus species are residents [1] and rest are migratory. Karnataka state represents 500 plus bird species with 48 listed in threatened category. Mysore avifauna was documented [2], Avifauna of Biligiri Rangaswamy temple by [3], [4] reported about Anekere wetland avifaunal diversity, [5] reported wetland avifauna of Kundavada lake Davangere, [6] in Gulbarga. No research on was carried out in the Kaggaladu bird sanctuary. The present study provides comprehensive data on avifaunal diversity and status.

II. MATERIALS AND METHODS

A. Study area

Kaggaladu bird sanctuary is located about 9 km to the north-west of Sira town of Tumakuru District of Karnataka. It is situated about 56 Km far from Tumakuru and 123 Km from Karnataka Capital Bengaluru. It is geographically located between latitudinal parallels of 13º 48' to13º 49'N and longitudinal parallels of 75º 51' to75º 53'E. The average rain fall is around 60cm annually.

B. Methodology

Inventorying on each visit all the birds were identified species wise with as much accuracy. Birds were saturated by directed observation using a pair of Olympus binoculars (10x50). For identification and field-diagnosis of birds, colours plates of [7] and [8] were used. The common scientific names of the birds given in the list followed the Birds of the world, recommended English Names are by [9]. The common-Rare, Resident-Migratory Status of the bird are classified as per [10].

III. RESULT AND DISCUSSIONS

During the present investigation 48 different species of birds belonging to18 families and 12 orders were recorded (Table 1). More number of species were sighted in the order Ciconiformes 10, Passeriformes 09, Charadriiformes 07, Gruiformes 05, Anseriformes and Coraciiformes 04 each, Falconiformes 03, Pelecaniformes 02 while, in Podicipodiformes Columbiformes, Psittaciformes and Cuculiformes one species each. In the present study 41residentialbirds, 10 migratory birds and 20 resident-migratory birds were recorded (Table 2 and Fig. 1). The resident birds are observed in most of the months of study period, migratory birds were observed in winter season. Most of the species were found in the winter season due to availability of sufficient water and vegetation around it.

IV. CONCLUSION

The diversity of birds are affected by various factors like the food availability and biotic changes in the wetlands[11].The study documents the rich avifauna diversity showing the area still provides some potential habitats for declining population of the threatened birds. In due course prevailing bird species diversity may decline disturbing habitat. The increase of the vegetation and

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prevention of habitat destruction leads to increase of bird population. Therefore it is the need to monitor Bird Sanctuary. The study could provide the baseline for research which could be used for conservation of birds. The search is continued and hope the number will be increased in feature.

Table 1 Number of orders present in the study area

Sl. No.	Orders	No. of Families	No. of Species
1	Podicipodiformes	1	1
2	Pelecaniformes	1	2
3	Ciconiformes	3	10
4	Anseriformes	1	4
5	Falconiforms	1	3
6	Gruiformes	1	5
7	Charadriformes	2	7
8	Columbiformes	1	1
9	Psittaciformes	1	1
10	Cuculiformes	1	1
11	Coraciiformes	2	4
12	Passiriforms	3	9
Total		18	48

Table 2 A systematic list of birds with their status in the study area

Order	Family	Scientific Name	Common Name	Status
Podicipediformes	Podicipitidae	Tachybaptusruficollis	Little grebe	R
Pelecaniformes	Phalacrocoracidae	Phalacrocoraxniger	Little cormorant	RM
		Phalacrocoraxcarbo	Great cormorent	RM
Ciconiiformes	Ardeidae	Ardeacinerea	Grey heron	RM
		Ardeapurpurea	Purple heron	RM
		Ardealagrayii	Pond heron	R
		Nycticorasnycticoras	Night heron	R
		Bubulcus ibis	Cattle egret	RM
		Casmerodiusalbus	Great egret	RM
		Mesophoyxintermedia	Median egret	RM
		Egrettagarzetta	Little egret	R
	Ciconiidae	Mycteria leucocephala	Painted stork	RM
	Threskiornithidae	Pseudibispapillosa	Black ibis	R
Anseriformes	Anatidae	Dendrocygnajavanica	Lesser Whisteling teal	R
		Anascrecca	Commenteal	RM
		Amaspoecilorhyncha	Spotbilled duck	RM
		Anasquerquedula	Garganey	M
Falconiformes	Accipitridae	Milvusmigrans	Common Pariahkite	R
		Halliasturindus	Brahminy Kite	R
		Accipiter nisus	Sparrow Hawk	R
Gruiformes	Rallidae	Amaurornisphoenicures	White breasted water hen	R
		Gallicrexcinerea	Water cock	RM

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		Gallinulachloropus	Indian morehen	R
		Porphyria porphyrio	Purple morehen	RM
		Fulicaatra	Coot	R
Charadriiformes	Charadriidae	Vanellusindicus	Redwatteled lapwing	R
		Charadriusdubius	Little ringed plover	M
		Tringahypoleucos	Common sand piper	RM
		Calidrisminuta	Little Stint	M
		Calidristestacea	Curlew Sand piper	M
	Laridae	Sterna aurantia	Indian River Tern	RM
		Sterna hirundo	Common Tern	R
Columbiformes	Columbidae	Streptopeliachinensis	Spotted Dove	R
Psittaciformes	Psittacidae	Psittaculakrameri	Rose Ringed parakeet	R
Cuculiformes	Cuculidae	Eudynamysscolopacea	Koel	R
Coraciiformes	Alcedinidae	Halcion smyrnensis	White breasted kingfisher	R
		Alcedoatthis	Small blue kingfisher	R
		Cerylerudis	Pied Kingfisher	R
	Meropidae	Meropsorientalis	Small green bee eater	R
Passeriformes	Sturnidae	Acridotheres tristis	Indian Myna	R
		Acridotheres fuscus	Jungle Myna	R
	Corvidae	Corvussplendens	House crow	R
		Pellorneumruficeps	Spoted Babler	R
	Motacillidae	Motacillamaderaspatnsis		R
		Motacillaflava		R
		Motacillacinerea		M
		Motacilla alba		RM
		Antusrufulus		R

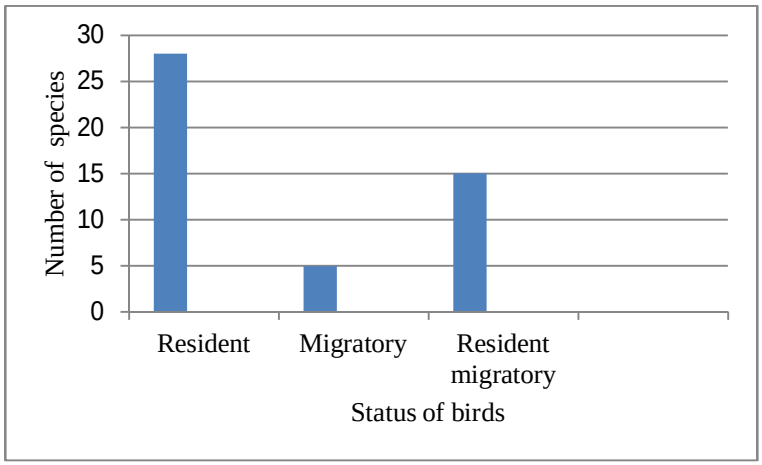


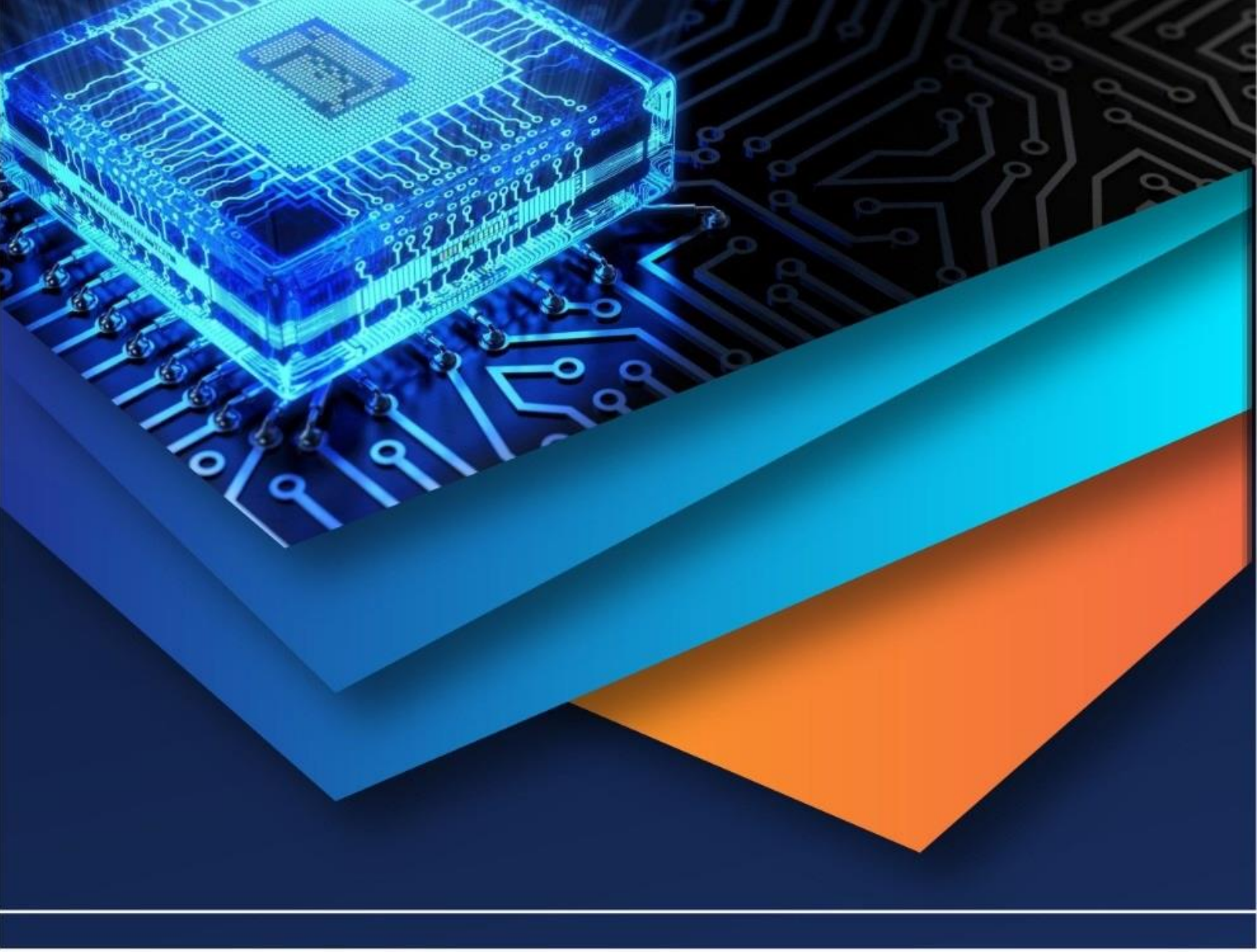
Fig. 2 Status of the birds in the study area

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