



CHECK LIST OF AVIFAUNA OF KHUDUS VANAUSHADI AND NAKSHATRAVAN OF FOREST DEPARTMENT OF MALSHIRAS TAHASIL DIST: SOLAPUR [MAHARASHTRA]

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ABSTRACT :

Khudus vanaushadhi and nakshatravan is situated in the Malshirastahsil. The Khudusvanaushadhi and nakshatravan is 9 kms from Malshiras being situated in Khudus, on Pune Pandharpur state highway. Khudus vanaushadhi and nakshatravan is one of the richest biodiversity areas which represent diverse ecosystem like grasslands, woodlands and a small pond ecosystem. Mean annual rainfall of the study site is 400 to 500mm with an average temperature range between 13° c to 42° c.



The present paper is a byproduct and corresponds to the concurrent bird observation made alongside for the one year. Assessment of the conservation status, habitat, utilization pattern, conflict of the Khudus forest accomplished during January 2018 to December 2018. This paper represents to be the first scientific documentation on avifauna in this particular area. A check list of recorded bird species is prepared.

KEYWORDS : Grassland, Diversity, Birds, Khudus vanaushadhi, Nakshatravan, Grassland, Woodland.

INTRODUCTION:

Birds are major units of environment. They play key role in ecology. They are useful to mankind in various ways. Because of global warming and human interference their population is declining. The major cause of decline number of bird species is due to habitat degradation, introduction of predators, constriction of river channels and their interrelationship between these factors (Hughy' 1985). The birds are commonly considered as indicator species of that vicinity (Blair, 1999). The different studies have examined the anthropogenic impact, habitat loss, agricultural practices on birds. (Hugeset *al.*, 2002). Wetlands are fragile and productive ecosystems on which number of anthropogenic activities affecting that results decline water bird population and habitat utilization (Sharma and SainiMinakshi, 2012). Prasad (2003) surveyed the avifauna of Solapur district and reported checklist of birds. The biomonitoring of avifauna is carried at Hipparga lake (Darekar and Kumbhar, 2017). Devkar *et al.*, (2016) studied seasonal fluctuation of birds in Jawalgaon wetland taluka Barshi of Solapur district of Maharashtra state and found 62 bird species out of which 31 residential, 5 visitors and 26 migratory. The present study is carried in a green patch of Malshiras taluka of Solapur district. The Khudus vanaushadhi and nakshatravan has a forest area and having Nira right water canal at its edge. This site is too favorable to attract large number of birds. The study site is restricted and reserved area of department of forest and this region comprises as semi evergreen forest.

MATERIAL AND METHODS:**Material****Study site:** Khudus vanaushadhi and nakshatravan

(www.googlemaps.com)

The Khudus vanaushadhi and nakshatravan is situated on the Palakhi Marg in Malshiras taluka. The area of Khudus vanaushadhi and nakshatravan is 14 hectares. It is situated 9 kms away from Malshiras, taluka place and 114kms away from district place Solapur. Nearest town to the study site is Pandharpur which is well known pilgrim center. It is 4 kms away from Khudus village.

Methods :

The survey was carried during January 2018 to December 2018. The survey was conducted every month early in sun rising to 9 am and evening 4.30 to sunset. Birds were observed using 8x35 binocular Olympus and identified with the help of field guide (Ali, (2015), Grimmet (2015) and Pandey (2011)). The photographs were carried by digital camera.

RESULT AND DISCUSSION:

In the present investigation , totally 71 bird species in to 44 families have been recorded Khudus vanaushadhi and nakshatravan for the period of 12 months *i.e* from January 2018 to December 2018 . As the study period includes monsoon, winter and summer season. The variability in the climate is observed which resulted in the different bird count at the study site. The recorded birds are categorized in to resident, local and migratory birds and further more aquatic and terrestrial. The availability of variety of food and nesting behavior of many birds was also studied.

RECORD OF BIRDS IN THE STUDY PERIOD DURING THE VISITS

Sr.No	Month	Date of Record	Number of Species of Aquatic Birds	Total	Number of Species of Terrestrial Birds	Total	Number of species of Local Birds	Total	Number of Species of local Migratory Birds	Total	Number of Migratory Birds	Total	Grand Total
1	Jan-2018	01-01-2018	10	20	33	68	30	62	08	16	05	09	48
		15-01-2018	10		35		32		08		04		47
2	Feb-2018	01-02-2018	11	23	46	92	32	72	10	16	03	07	57
		15-02-2018	12		46		40		6		04		50
3	Mar-2018	01-03-2018	10	21	48	97	45	90	07	14	04	09	56
		15-03-2018	11		49		45		07		05		59
4	Apr-2018	01-04-2018	10	20	44	90	45	90	07	14	04	10	54
		15-04-2018	10		46		45		07		06		57
5	May-2018	01-05-2018	10	19	45	90	47	94	07	14	04	12	60
		15-05-2018	16		45		47		08		08		63
6	Jun-2018	01-06-2018	13	28	48	88	47	86	06	14	10	20	63
		15-06-2018	15		40		42		07		10		58
7	Jul-2018	01-07-2018	11	22	46	92	44	88	08	16	10	20	60
		15-07-2018	11		46		44		08		10		63
8	Aug-2018	01-08-2018	16	18	40	84	40	80	09	20	08	16	61
		15-08-2018	20		44		40		12		08		63
9	Sept-2018	01-09-2018	16	20	47	93	42	84	09	18	08	16	63
		15-09-2018	14		46		42		09		08		62
10	Oct-2018	01-10-2018	11	22	48	92	44	86	08	16	06	15	61
		15-10-2018	11		44		42		08		09		56
11	Nov-2018	01-11-2018	10	20	45	89	40	80	10	18	07	16	57
		15-11-2018	10		42		40		08		06		50
12	Dec-2018	01-12-2018	12	22	42	84	42	86	08	16	10	16	51
		15-12-2018	10		42		44		08		06		53

CHECK-LIST OF KHUDUS VANAUSHADHI AND NAKSHATRA VAN

Sr.No	Name of the Family	Species No.	Common Name	Scientific Name	Occurrence
1	Phalacrocoracidae	1	Common Cormorant	<i>Phalacrocorax carbo sinensis</i>	
2	Ardeidae	2	Little Egret	<i>Egretta intermedia</i>	
		3	Large Egret	<i>Ardela alba</i>	
		4	Pond Heron	<i>Ardeola grayii</i>	
		6	Grey Heron	<i>Ardeaconerea</i>	
		7	Night Heron	<i>Nycticorax nycticorax</i>	
3	Ciconiidae	8	Painted Stork	<i>Mycteria leucocephala</i>	
4	Threskiornithidae	9	Black Ibis	<i>Pseudibis papilosa</i>	
5	Anatidae	10	Spot Billed Duck	<i>Anas poecilorhyncha</i>	
6	Accipitridae	11	Brahminy Kite	<i>Haliastur indus</i>	
		12	Pariah Kite	<i>Milvus migrans</i>	
		13	Black Winged Kite	<i>Elanus caeruleus</i>	
		14	Shikra	<i>Accipiter badius</i>	
7	Falconidae	15	Peregrine Falcon	<i>Falco biamicus</i>	
8	Recurvirostridae	16	Black winged Stilts	<i>Himantopus himantopus</i>	
9	Phasianidae	17	Common Peafowl	<i>Pavocristatus</i>	
		18	Common Quail	<i>Coturnix coturnix</i>	
10	Phasianidae	19	Grey Partridge	<i>Francolinus posdicerianus</i>	
11	Laridae	20	Common Coot	<i>Fulica atra</i>	
		21	White Breasted Water Hen	<i>Amouromis phoenicurus</i>	
12	Glareolidae	22	Indian River Tern	<i>Stema aurantia</i>	
13	Columbidae	23	Blue Rock Pigeon	<i>Columba livia</i>	
		24	Ring Dove	<i>Streptopelia senegalensis</i>	

		25	Spotted Dove	<i>Streptopelia chinensis</i>	
14	Psittacidae	26	Rose Ringed Parakeet	<i>Psittaculacyanocephala</i>	
15	Charadriidae	27	Red Wattled Lapwing	<i>Vanellus indicus</i>	
16	Caculidae	28	Koel	<i>Eudynamis scolopacea</i>	
		29	Brain Fever Bird	<i>Cuculus verius</i>	
		30	Crow Pheasant	<i>Centropus sinensis</i>	
17	Alcedinidae	31	White Breasted Kingfisher	<i>Halcyon smymensis</i>	
		32	Pied Kingfisher	<i>Ceryle rudis</i>	
		33	Small Kingfisher	<i>Alcedo atthis</i>	
18	Coraciidae	34	Indian Roller	<i>Corasis bengalensis</i>	
19	Hirundinidae	35	Wire tailed Swallow	<i>Hirundo smithii</i>	
20	Alaudidae	36	Crested Lark	<i>Galeridacristata</i>	
		37	Indian Small Skylark	<i>Aluda arvensis</i>	
21	Meropidae	38	Green Bee Eater	<i>Merops orientalis</i>	
22	Bucerotidae	39	Common Grey Hornbill	<i>Tokus birostris</i>	
23	Upipidae	40	Indian Hoopie	<i>Upapa epops</i>	
24	Capitonidae	41	Crimson Red Coppersmith	<i>Megaliamaviridis</i>	
25	Laniidae	42	Gray Shrike	<i>Lanius sexitor</i>	
		43	Rufus Backed Shrike	<i>Lanius schach</i>	
26	Sturnidae	44	Common Myna	<i>Acridothera tristis</i>	
		45	Brahminy Myna	<i>Stumus pagodarum</i>	
		46	Rosy Pastor	<i>Stumus roseus</i>	
27	Corvidae	47	House Crow	<i>Corvus splendens</i>	
		48	Jungle Crow	<i>Corvus macrorhynchos</i>	
28	Oriolidae	49	Golden Oreole	<i>Oriolus oriolus</i>	
29	Muscicapidae	50	Common Babbler	<i>Turdoides caudatus</i>	
		51	Jungle Babbler	<i>Turdoides striatus</i>	
30	Pycnonotidae	52	Red Vented Bulbul	<i>Pycnonotus cafer</i>	
31	Irenidae	53	Common Iora	<i>Aegithina tiphia</i>	
32	Camphagidae	54	Small Minivet	<i>Perocrotus cinnamomeus</i>	
33	Muscicapidae	55	Common Tailor Bird	<i>sutorus</i>	
34	Tirdinae	56	Ashy Green Wren Warbler	<i>Prinia hodgsonii</i>	
		57	Magpie Robin	<i>Copsychus saularis</i>	
		58	Indian Robin	<i>Saxicoloides fulicata</i>	
		59	Pied Bushchat	<i>Saxicolapra taca prata</i>	
35	Passeridae	60	House Sparrow	<i>Passer domesticus</i>	
		61	Baya Weaver Bird	<i>Ploecus philippinus</i>	
		62	Spotted Munia	<i>Lonchura punctulata</i>	
		63	Black Headed Munia	<i>Lonchura Malacca</i>	
		64	Yellow Wagtail	<i>Motocilla flava</i>	
		65	Gray Wagtail	<i>Motocilla cinerea</i>	
		66	Large pied Wagtail	<i>Motacilla maderaspatensis</i>	
		67	Pipit	<i>Anthus hodgsonii</i>	
36	Motacillidae	68	Gray Tit	<i>Parus major</i>	
37	Paridae	69	Indian Purple Sunbird	<i>Nectarinia asiatica</i>	
		70	Purple Rumped Sunbird	<i>Nectarinia zeylonica</i>	
38	Nectarinidae	71	Crested Lark	<i>Galeridacristata</i>	
39	Alaudidae				

Key to abbreviations:

R- Resident, M- Migrant, RM – Local Migrant, A- Aquatic, T- Terrestrial

CONCLUSION:

Total 71 bird species belonging to 39 families have been recorded at Khudus vanaushadhi and nakshatravan during the period of 12 months from January 2018 to December 2018. The number of species was observed maximum during winter season at different migratory visit this forest. It can be concluded that

this forest is rich in variety of food that attracts different types of birds . The numbers of migratory birds is also remarkable and they are recorded in maximum population in winter season . The poaching is not noticed in the study period. The Khudus vanaushadi and nakshatravan is an excellent forest for the winter visitors with local birds . It protected from human interference and to be kept free from effect of pollution.

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Record of Avifauna of Khudus Vanaushadi and Nakshatravan Of Forest Department Of Malshiras Tahsil

Sr.No	Month	Date of Record	Number of Aquatic Birds	Number of Terrestrial Birds	Number of Local Birds	Number of Local Migratory Birds	Number of Migratory Birds
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9	Sep-2018	01-09-2018	20	93	84	18	16
10	Oct-2018	01-10-2018	22	92	86	16	15
11	Nov-2018	01-11-2018	20	89	80	18	16
12	Dec-2018	01-12-2018	22	84	86	16	16

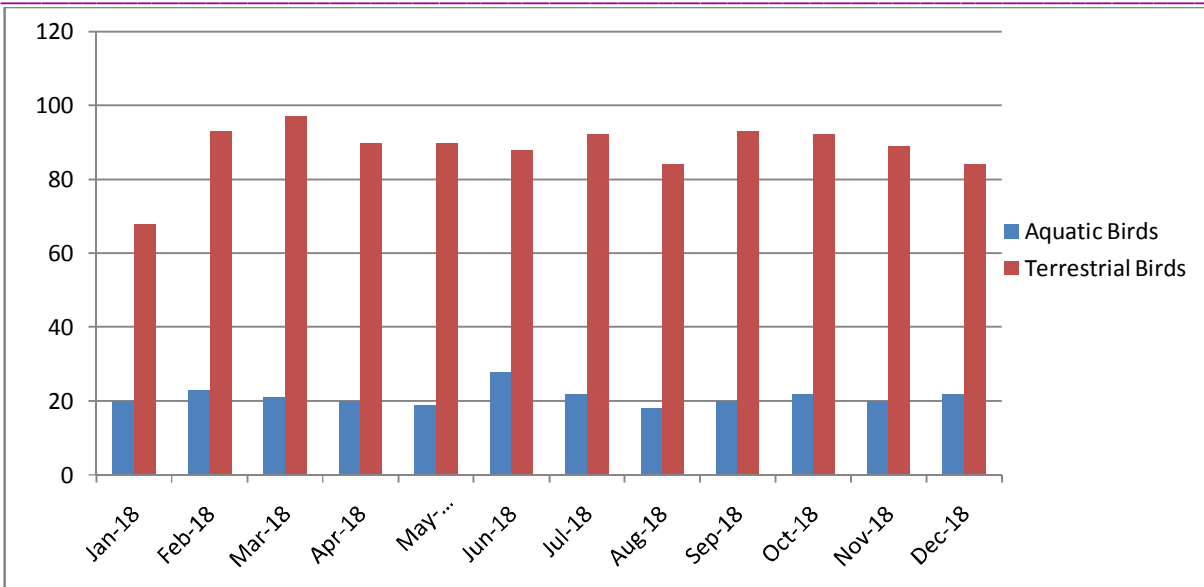


Diagram showing record of aquatic and terrestrial birds during the period of Jan 2018 to Dec 2018 at Khudus Vanaushadi and Nakshatravan Of Forest Department Of Malshiras Tahsil

Add occurrence in table and edit the data

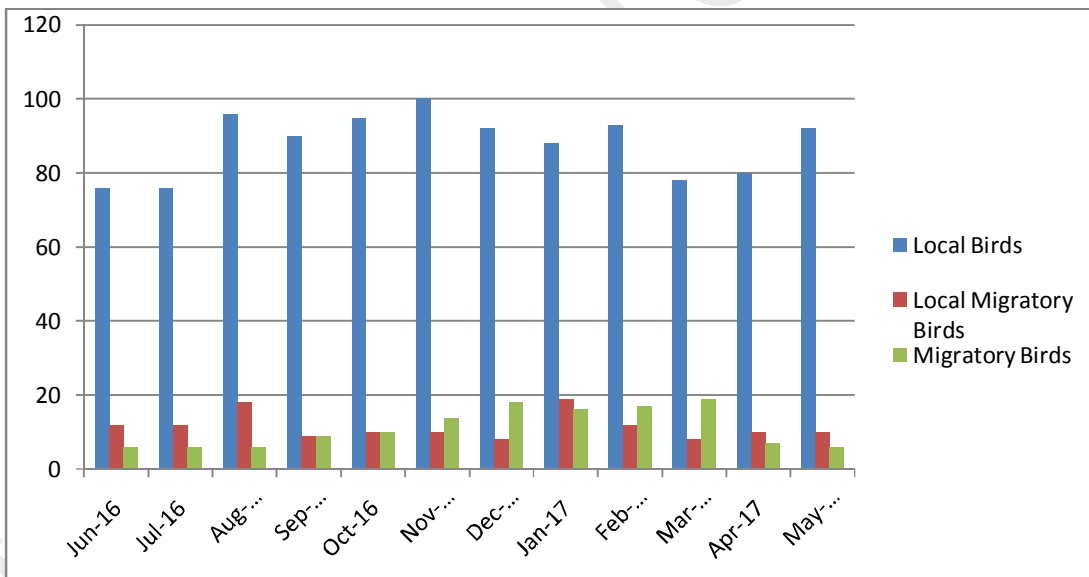


Diagram showing record of local, local migratory and migratory birds during the period of June 2016 to May 2017 at Sayajiraje Park.



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