



# Status Of Bird Diversity In Seven Taluka's Of Yavatmal District Of Maharashtra, Central India.

Praveen Joshi

Professor, Department of Zoology, Amolakchand Mahavidyalaya, Yavatmal. 445001

## ABSTRACT

Yavatmal district lies in the South-Western part of the Wardha Penganga-Waingangā plain in central India. The district lies between 19.26' and 20.42' north latitudes and 77.18' and 79.9' east longitudes. Yavatmal district is the highest cotton producing district in Maharashtra known as white gold district. Geographically it has formed from the Balaghat mountain ranges, this district is known as the hilly middle plateau district. The climate is hot and dry with an average temperature of 46 ° C. Up to 11 ° C in winter. The average rainfall of the district is 965 mm. About 21% of the district is covered by forest. There are over 2500 reservoirs in Yavatmal district including big, medium and small projects. Bird study started in the year 2009 and it continues till 2022. Mainly focused on diverse habitat in seven taluka which includes dams, rivers, streams, grasslands, shrubs and forests. Regular visits were scheduled for bird watching to any one of the habitats, these include 32 reservoirs, 5 rivers, 6 grasslands and 7 forests. A total of 326 species of birds of 13 orders and 56 families were sighted during the study period. They are distributed accordingly , 116 widespread winter visitors, 190 widespread residents, 7 passage visitors, 9 breeding migrants and 4 resident migrants. According to IUCN's Red Data List, 14 are in the Near Threaten, 5 in the Vulnerable and 2 in the Endangered category. The highest number of migratory waterfowl records i.e. 64 were recorded at Bembala, Nilona, Borgaon, Goki, Waghadi and Arunavati dams. 51 other migratory species including prey birds, warblers, pipits, cuckoos, shrikes, flycatchers, starlings, swallows, lapwings and larks were observed in the various habitat like Chausala forest, Durg forest , Jam range, Hivri range, Kita-Kapra forest, echori forest, Umrada forest, Bahiram and Lakhmapur range. Some species were recorded on grasslands like Echori, Bembala, Borgaon, Durg and Dattapur. 190 widespread residents, 7 passage visitors, 9 breeding migrants and 4 resident migrants share the same habitat. Yavatmal district currently has a large number of reservoirs and forests, but the development of road network, railways, deforestation for brick kilns, industrialization and urbanization are all endangering the habitat, which has a direct impact on bird habitat and bird numbers. What is needed is a nature-complementary development without human-centered development so that the existence of the birds and their habitats can be sustained. Yavatmal district having 16 Taluka from that 7 Taluka all the types of habitat are routinely monitor , important habitat from 4 taluka were visited few times but remaining 5 Taluka are yet be visited so in future it must be visited regularly and hope we will successful to discover untouched area and get some new bird species.

Keywords: Bird Diversity, Seven Taluka, Reservoir, forest, grassland , IUCN status , Rare Records.

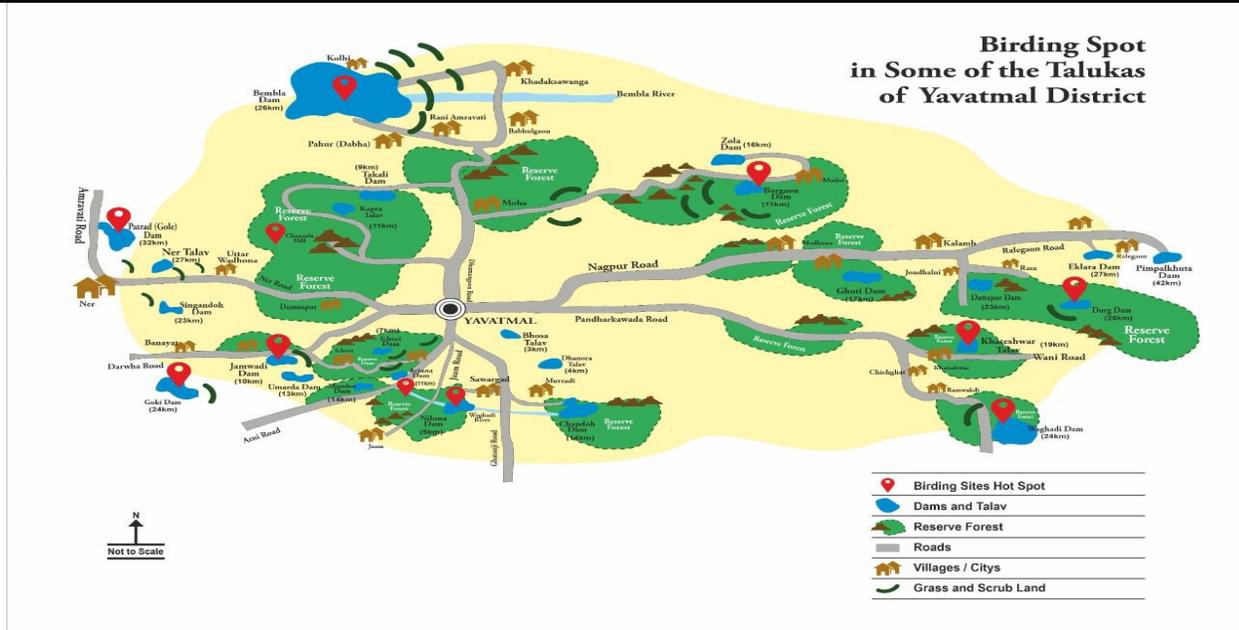
## Introduction:

Bird diversity is much greater than that of reptiles, amphibians and mammals respectively. Presently, there are 10,711 extant species and 158 extinct species of birds of the world. The diversity is astounding, with birds existing almost everywhere in the world. At least 1,317 bird species have been recorded in India against around 10,000 species found worldwide. Of the 1,317 species recorded in India, 72 are endemic to the country. There are 568 bird species observed in Maharashtra including migratory and residential birds. More than 450 species have been recorded till date in Vidarbha. Factors affecting on bird population i.e. Presence of food resources is a key factor which affects the habitat suitability of bird species. Likewise, bird density and diversity may be also affected by other various factors such as wetland size, water level fluctuation, predators, and habitat heterogeneity. In addition to habitat loss and climate change, Bay Area birds face numerous other issues and threats. These include excavation on dam sites, summer cultivation on wetland, over cattle grazing, excessive fishing, habitat destruction, trapping of birds, pollution and pesticides; fire and controlled burning regimes; invasive species; collisions; entanglement and entrapment; predation; disease; and illegal trade in wildlife.

Present paper highlights diversity of migratory, residential birds including waders, passerine and waders which are observed in the selected study area of Yavatmal district.

## Materials and Methods

There are 16 talukas in the Yavatmal district. The study on the birds and their habitat was started in 2009. When actual scientific study was carried out on birds intentionally focused on other talukas along with Yavatmal like Babhulgaon, Kalamb, Ner, Darwha, Ghatanji and aarni. Study was started by visiting selected reservoir like Nilona Dam ( 20.328563 N, 78.143155 E ), Borgaon Dam (20.452929 N, 78.190815 E), Jamwadi Dam ( 20.364608 N, 78.013074 E ), Bembla Dam (20° 353496 N, 78° 08 0416 E) Goki Dam (20°1803 N 77°5504 E ), Pathrad Gole ( 20.538320 N, 77.886714 E ) Chapdov Dam (20.264398 N, 78.212570 E) Waghadi Dam (20.268263 N, 78.305610 E) Takali Dam (20°27054 N 78°06090 E), Kapra Dam (20.456760 N, 78.065161 E ) Tembhurni Dam ( 20.465284 N 78.022632 E ) Zola Dam (20.459876 N 78.164682 E) Durug Dam (20.386325 N 78.353556 E ) Dattapur Dam (20.404466 N, 78.322313 E ) Eklara Dam (20.405251 N, 78.438227 E ) Umerda Dam ( 20.355950 N, 78.020895E ) Pimpalkhuta Dam ( 20.351912 N 78.507031 E) Arjuna Dam ( 20.322125 N 78.054035 E) Mandev Dam (20.343870 N 78.045038 E) and Khateshwar Dam ( 20.329324 N 78.280887 E) . During the study period more than 50 visits on each water body were done. along with fresh water bodies regular visited to forest ranges in the talukas these are jam (20.352981 N 78.109152 E ), Echori (20.360216 N 78.060991 E ), Chausala (20.421147 N 78.079644 E ), Durg (20.384450 N 78.376178 E ), Umerda (20.364608 N, 78.013074 E ), Hivri (20.343870 N 78.045038 E ), Dumnapur (20.395910 N 78.07485 E ), Borgaon (20.452929 N, 78.190815 E ), Jodmoha (20.317726 N 78.294309 E ) ) and Waghadi (20.263697 N 78.307889 E ). I also visited grasslands like Echori, Bembla, Borgaon, Khateshwar and Arjuna. During the study, I would go to every water source, in the forest, on the grassland for observation between 6 and 9 in the morning, but sometimes also in the afternoon for bird watching. The Nikon 10/40 telescope helped me a lot when I was watching the birds, and I used to take pictures with the help of DSLR 7500 and 200-500 mm for proof. Books like Inskip - Birds of Indian Subcontinent and Salim Ali - Indian Birds have helped to identify the birds. After receiving rare bird entries, I used to check their status in Maharashtra and India with the help of e-Bird, Oriental Bird Club Image web site.



Map indicating all types of bird habitat in the seven Taluka of Yavatmal district.

## Result and Discussion

Yavatmal district is famous all over Maharashtra for producing white gold (Cotton). It is also geographically rich as a large area is covered by forest. There are mountain ranges, big dams, reservoirs, lakes and wide network of lakes in Yavatmal district. Along with two major rivers Panganga and Wardha its tributaries Pus, Bembala, Nirguda, Waghadi and Arunavati. There are total 16 talukas in the district out of which 7 talukas adjoining Yavatmal taluka include Bhabhulgaon, Ner, Kalamb, Darvha, Arni, Ghatanji and Ralegaon. Bird watching started in 2009 at all the major water sources, forests and grasslands. Reservoirs include Nilona Dam, Jamwadi Dam, Kapra Dam, Takli Dam and Chapdoh Dam in Yavatmal taluka, Pathrad Gole dam and Ner dam in Ner taluka, Goki dam and Umarda dam in Darvha taluka. Borgaon dam, Bembala dam and Zola dam, in Bhabhulgaon taluka, Ghoti dam, Dattapur dam and Durg dam in Kalamb taluka. Waghadi dam and Khateshwar lake in Ghatanji taluka. Mandev dam and Arjuna dam in Arni taluka. Waterfowl records were taken at the sites. The forests of these eight talukas include Chausala, Echori, Jam, Durg, Lakhmapur, Umerda, Hiwri, Jam, Dumnapur, Borgaon, Jodmoha, Waghadi and Ner areas. In this area mainly birds of prey and other passerine birds were observed. During the period between 2009 to 2021 monitoring each habitat several times during every visit and successfully recorded 326 bird species belonging to 13 orders and 56 families. Of the 326 bird species recorded to date, 65 of the 115 wader species are migratory and 50 are residential. During these years of study, records were taken of some migratory waterfowl which are considered rare for Yavatmal district these include Brown Breasted Flycatcher, Common Shelduck, Ferruginous Pochard, Jack Snipe, Eurasian Curlew, Wimbrel, Terek Sandpiper, Ruff, Red Necked Phalarope, Grey Plover, Grey Headed Lapwing, Heuglin's Gull, Indian Skimmer, Black Bellied Tern, Caspian tern and Saunders tern.

S.No.	COMMON NAME	SCIENTIFIC NAME	STATUS	IUCN CATEGORY
<b>Order: GALLIFORMES</b>				
<b>Family: PHASIANIDAE</b>				
1	GREY FRANCOLIN	<i>Francolinus pondicerianus</i>	R	LC
2	PAINTED FRANCOLIN	<i>Francolinus pictus</i>	R	LC
3	JUNGLE BUSH QUAIL	<i>Perdicula asiatica</i>	R	LC
4	COMMON QUAIL	<i>Cotumix cotumix</i>	W	LC
5	RAIN QUAIL	<i>Coturmix coromandelica</i>	R	LC
6	BARRED BUTTONQUAIL	<i>Tumix suscitator</i>	R	LC
7	YELLOW LEGGED BUTTON QUAIL	<i>Turnix tanki</i>	R	LC

8	ROCK BUSH QUAIL	<i>Perdica argoondah</i>	R	LC
9	GREY JUNGLEFOWL	<i>Gallus sonneratti</i>	R	LC
10	RED JUNGLEFOWL	<i>Gallus gallus</i>	R	LC
11	INDIAN PEAFOWL	<i>Pavo cristatus</i>	R	LC
<b>Order: ANSERIFORMES</b>				
<b>Family: DENDROCYGNIDAE</b>				
12	LESSER WHISTLING DUCK	<i>Dendrocygna javanica</i>	R	LC
<b>Family: ANATIDAE</b>				
13	GREY-LAG GOOSE	<i>Anser anser</i>	W	LC
14	BAR-HEADED GOOSE	<i>Anser indicus</i>	W	LC
15	RUDDY SHELDUCK	<i>Tadorna ferruginea</i>	W	LC
16	COMB DUCK	<i>Sarkidiornis melanotos</i>	R	LC
17	COTTON PYGMY-GOOSE	<i>Nettapus coromandelianus</i>	R	LC
18	MALLARD	<i>Anas platyrhynchos</i>	W	LC
19	COMMON SHELDUCK	<i>Tadorna tadorna</i>	W	LC
20	GADWALL	<i>Anas strepera</i>	W	LC
21	EURASIAN WIGEON	<i>Anas Penelope</i>	W	LC
22	SPOT-BILLED DUCK	<i>Anas poecilorhyncha</i>	R	LC
23	NORTHERN SHOVELER	<i>Anas clypeata</i>	W	LC
24	NORTHERN PINTAIL	<i>Anas acuta</i>	W	LC
25	GARGANEY	<i>Anas querquedula</i>	W	LC
26	COMMON TEAL	<i>Anas crecca</i>	W	LC
27	RED-CRESTED POCHARD	<i>Rhodonessa rufina</i>	W	LC
28	COMMON POCHARD	<i>Aythya ferina</i>	W	VU
29	FERRUGINOUS POCHARD	<i>Aythya nyroca</i>	W	NT
30	TUFTED DUCK	<i>Aythya fuligula</i>	W	LC
<b>Order: PICIFORMES</b>				
<b>Family: PICIDAE</b>				
31	EURASIAN WRYNECK	<i>Jynx torquilla</i>	W	LC
32	BROWN-CAPPED PYGMY WOODPECKER	<i>Dendrocopos nanus</i>	R	LC
33	YELLOW-CROWNED WOODPECKER	<i>Dendrocopos mahrattensis</i>	R	LC
34	BLACK-RUMPED FLAMEBACK	<i>Dinopium benghalense</i>	R	LC
35	WHITE-NAPED WOODPECKER	<i>Chrysocolaptes festivus</i>	R	LC
<b>Family: MEGALAIMIDAE</b>				
36	COPPERSMITH BARBET	<i>Megalaima haemacephala</i>	R	LC
<b>Order: BUCEROTIFORMES</b>				
<b>Family: BUCEROTIDAE</b>				
37	INDIAN GREY HORNBILL	<i>Ocyeros birostris</i>	R	LC
<b>Order: UPEPIFORMES</b>				
<b>Family: UPUPIDAE</b>				
38	COMMON HOOPOE	<i>Upupa epops</i>	R	LC
<b>Order: CORACIFORMES</b>				
<b>Family: CORACIIDAE</b>				
39	INDIAN ROLLER	<i>Coracias benghalensis</i>	R	LC

40	EUROPEAN ROLLER	<i>Coracias garrulus</i>	PV	NT
	<b>Family:ALCEDINIDAE</b>			
41	COMMON KINGFISHER	<i>Alcedo atthis</i>	R	LC
	<b>Family: HALCYONIDAE</b>			
42	STORK BILLED KINGFISHER	<i>Halcyon capensis</i>	R	LC
43	WHITE THROATED KINGFISHER	<i>Halcyon smyrnensis</i>	R	LC
	<b>Family: CERYLIDAE</b>			
44	PIED KINGFISHER	<i>Ceryle rudis</i>	R	LC
	<b>Family: MEROPIDAE</b>			
45	GREEN BEE EATER	<i>Merops orientalis</i>	R	LC
46	BLUE-TAILED BEE-EATER	<i>Merops philippinus</i>	BM	LC
47	BLUE CHEEK BEE-EATER	<i>Merops persicus</i>	PV	LC
	<b>Order: CUCULIFORMES</b>			
	<b>Family: CUCULIDAE</b>			
48	PIED CUCKOO	<i>Clamator jacobinus</i>	BM	LC
49	COMMON HAWK CUCKOO	<i>Hierococyx varius</i>	R	LC
50	INDIAN CUCKOO	<i>Cuculus micropterus</i>	BM	LC
51	EURASIAN CUCKOO	<i>Cuculus canorus</i>	BM	LC
52	GREY –BELLIED CUCKOO	<i>Cacomantis passerinus</i>	BM	LC
53	SIRKEER MALKOHA	<i>Taccocua</i>	R	LC
54	ASIAN KOEL	<i>Eudynamys scolopacea</i>	R	LC
	<b>Family: CENTROPODIDAE</b>			
55	SOURTHERN COUCAL	<i>Centropus coucal</i>	R	LC
	<b>Family: PSITTACIDAE</b>			
56	ALEXANDRINE PARAKEET	<i>Psittacula eupatria</i>	R	NT
57	ROSE RINGED PARAKEET	<i>Psittacula krameri</i>	R	LC
58	PLUM-HEADED PARAKEET	<i>Psittacula cyanocephala</i>	R	LC
	<b>Order: APODIFORMES</b>			
	<b>Family: APODIDAE</b>			
59	LITTLE SWIFT	<i>Apus affinis</i>	R	LC
60	ALPINE SWIFT	<i>Tachymarptis melba</i>	R	LC
61	ASIAN PALM SWIFT	<i>Cypsiurus balasiensis</i>	R	LC
	<b>Family: HEMIPROCENIDAE</b>			
62	CRESTED TREESWIFT	<i>Hemiprocne coronata</i>	R	LC
	<b>Order: STRIGIFORMES</b>			
	<b>Family: TYTONIDAE</b>			
63	COMMON BARN OWL	<i>Tyto alba</i>	R	LC
	<b>Family: STRIGIDAE</b>			
64	INDIAN SCOPS OWL	<i>Otus bakkamoena</i>	R	LC
65	BROWN FISH OWL	<i>Ketupa zeylonensis</i>	R	LC
66	MOTTLED WOOD OWL	<i>Strix leptooogrammica</i>	R	LC
67	BROWN HAWK OWL	<i>Ninox scutulata</i>	R	LC
68	ROCK EAGLE OWL	<i>Bubo bengalensis</i>	R	LC
69	JUNGLE OWLET	<i>Glaucidium radiatum</i>	R	LC
70	SPOTTED OWLET	<i>Athene brama</i>	R	LC
71	SHORT EARED OWL	<i>Asio flammeus</i>	W	LC
	<b>Family: CAPRIMULGIDAE</b>			

72	INDIAN NIGHTJAR	<i>Caprimulgus asiaticus</i>	R	LC
73	GREY NIGHTJAR	<i>Caprimulgus indicus</i>	R	LC
74	SAVANNAH NIGHTJAR	<i>Caprimulgus affinis</i>	R	LC
<b>Order: COLUMBIFORMES</b>				
<b>Family: COLUMBIDAE</b>				
75	ROCK PIGEON	<i>Columba livia</i>	R	LC
76	ORANGE BREASTED GREEN PIGEON	<i>Treron bicinctus</i>	W	LC
77	YELLOW-FOOTED GREEN PIGEON	<i>Treron phoenicoptera</i>	R	LC
78	ORIENTAL TURTLE DOVE	<i>Streptopelia orientalis</i>	R	LC
79	LAUGHING DOVE	<i>Streptopelia senegalensis</i>	R	LC
80	SPOTTED DOVE	<i>Streptopelia chinensis</i>	R	LC
81	RED COLLARD DOVE	<i>Streptopelia tranquebarica</i>	R	LC
82	EURASIAN COLLARED DOVE	<i>Streptopelia decaocto</i>	R	LC
<b>Order: GRUIFORMES</b>				
<b>Family: RALLIDAE</b>				
83	BROWN CRAKE	<i>Amaurornis akool</i>	R	LC
84	BAILLON'S CRAKE	<i>Porzana pusilia</i>	W	LC
85	RUDDY BREASTED CRAKE	<i>Porzana fusca</i>	W	LC
86	WHITE BREASTED WATERHEN	<i>Amaurornis phoenicurus</i>	R	LC
87	PURPLE SWAMPHEN	<i>Porphyrio porphyrio</i>	R	LC
88	COMMON MOORHEN	<i>Gallinule chloropus</i>	R	LC
89	COMMON COOT	<i>Fulica atra</i>	R	LC
<b>Order: CICONIIFORMES</b>				
<b>Family: PTEROCLIDAE</b>				
90	CHESTNUT-BELLIED SANDGROUSE	<i>Pterocles exustus</i>	R	LC
91	PAINTED SANDGROUSE	<i>Pterocles indicus</i>	R	LC
<b>Family: SCOLOPACIDAE</b>				
92	COMMON SNIPE	<i>Lymnocyptes minimus</i>	W	LC
93	JACK SNIPE	<i>Gallinago gallinago</i>	W	LC
94	PIN TAILED SNIPE	<i>Gallinago stenura</i>	W	LC
95	BLACK TAILED GODWIT	<i>Limosa limosa</i>	W	NT
96	SPOTTED REDSHANK	<i>Tringa erythropus</i>	W	LC
97	COMMON REDSHANK	<i>Tringa totanus</i>	W	LC
98	MARSH SANDPIPER	<i>Tringa stagnatilis</i>	W	LC
99	COMMON GREENSHANK	<i>Tringa nebularia</i>	W	LC
100	GREEN SANDPIPER	<i>Tringa ochropus</i>	W	LC
101	WOOD SANDPIPER	<i>Tringa glareola</i>	W	LC
102	COMMON SANDPIPER	<i>Actitis hypoleucos</i>	W	LC
103	LITTLE STINT	<i>Calidris minuta</i>	W	LC
104	TEMMINCK'S STINT	<i>Calidris temminckii</i>	W	LC
105	EURASIAN CURLEW	<i>Numenius orauata</i>	W	NT
106	EURASIAN WHIMBREL	<i>Numenius phaeotus</i>	W	LC
107	TEREK SANDPIPER	<i>Xenus cinerus</i>	W	LC
108	CURLEW SANDPIPER	<i>Calidris ferruginea</i>	PV	NT
109	DUNLIN	<i>Calidris alpina</i>	W	LC
110	PIED AVOCET	<i>Recurvisrostra avosetta</i>	W	LC

111	RED NECKED PHALAROPE	<i>Phalaropus lobatus</i>	W	LC
112	RUFF	<i>Philomachus pugnax</i>	W	LC
	<b>Family: ROSTRATUIDAE</b>			
113	GREATER PAINTED SNIPE	<i>Rostratula benghalensis</i>	R	LC
	<b>Family: JACANIDAE</b>			
114	PHEASANT TAILED JACANA	<i>Hydrophasianus chirurgus</i>	R	LC
115	BRONZE WINGED JACANA	<i>Metopidius indicus</i>	R	LC
	<b>Family: BURHINIDAE</b>			
116	INDIAN THICK-KNEE	<i>Burhinus oediconemus</i>	R	LC
117	GREAT THICK-KNEE	<i>Esacus recurvirostris</i>	R	NT
	<b>Family: CHARADRIIDAE</b>			
118	BLACK-WINGED STILT	<i>Himantopus himantopus</i>	RM	LC
119	KENTISH PLOVER	<i>Charadrius alexandrinus</i>	BM	LC
120	PACIFIC GOLDEN PLOVER	<i>Pluvialis fulva</i>	W	LC
121	GREATER SAND PLOVER	<i>Charadrius leschenaultii</i>	W	LC
122	LESSER SAND PLOVER	<i>Charadrius mongolus</i>	W	LC
123	GREY PLOVER	<i>Pluvialis squatarola</i>	W	LC
124	COMMON RING PLOVER	<i>Charadrius haiticula</i>	W	LC
125	LITTLE RINGED PLOVER	<i>Charadrius dubius</i>	W	LC
126	YELLOW WATTLED LAPWING	<i>Vanellus malarbaricus</i>	R	LC
127	GREY HEADED LAPWING	<i>Vanellus cinereus</i>	W	LC
128	RIVER LAPWING	<i>Vanellus spinosus</i>	R	NT
129	RED WATTLED LAPWING	<i>Vanellus indicus</i>	R	LC
	<b>Family: GLAREOLIDAE</b>			
130	ORIENTAL PRATINCOLE	<i>Glareola maldivarum</i>	BM	LC
131	COLLARD PRATINCOLE	<i>Glareola pratincola</i>	PV	LC
132	INDIAN COURSER	<i>Cursorius coromandelicus</i>	R	LC
133	SMALL PRATINCOLE	<i>Glareola lactea</i>	R	LC
	<b>Family: LARIDAE</b>			
134	BROWN-HEADED GULL	<i>Larus brunnicephalus</i>	W	LC
135	PALLAS'S GULL	<i>Ichthyaeetus ichthyaeetus</i>	W	LC
136	HEUGLIN'S GULL	<i>Larus fuscus heuglini</i>	W	LC
137	BLACK HEADED GULL	<i>Chroicocephalus ridibundus</i>	W	LC
138	INDIAN SKIMMER	<i>Rynchops albicollis</i>	W	VU
139	GULL BILL TERN	<i>Gelochelidon nilotica</i>	PV	LC
140	BLACK BELLIED TERN	<i>Sterna acuticauda</i>	PV	EN
141	CASPIAN TERN	<i>Hydroprogne caspia</i>	W	LC
142	RIVER TERN	<i>Sterna aurantia</i>	RM	NT
143	WHITE WING TERN	<i>Chlidonias leucopterus</i>	W	LC
144	SAUNDER'S TERN	<i>Sterna saundersi</i>	W	LC
145	LITTLE TERN	<i>Sterna albifrons</i>	BM	LC
146	WHISKERED TERN	<i>Chlidonias hybridia</i>	W	LC
	<b>Family- ACCIPITRIDAE</b>			
147	OSPREY	<i>Pandion haliaetus</i>	W	LC
148	BLACK KITE	<i>Milvus migrans</i>	R	LC
149	BLACK SHOULDER KITE	<i>Elanus caeruleus</i>	R	LC

150	CRESTED GOSHAWK	<i>Accipiter trivirgatus</i>	R	LC
151	BESRA SPARROW HAWK	<i>Accipiter virgatus</i>	R	LC
152	SHIKRA	<i>Accipiter badius</i>	R	LC
153	EGYPTIAN VULTURE	<i>Neophron percnopterus</i>	R	EN
154	EURASIAN SPARROWHAWK	<i>Accipiter nisus</i>	R	LC
155	ORIENTAL HONEY BUZZARD	<i>Pernis ptilorhynchus</i>	R	LC
156	WHITE-EYED BUZZARD	<i>Butastur teesa</i>	R	LC
157	SHORT TOED SNAKE EAGLE	<i>Circaetus gallicus</i>	R	LC
158	CRESTED SERPENT EAGLE	<i>Spilornis cheela</i>	R	LC
159	INDIAN SPOTTED EAGLE	<i>Clanga hastata</i>	W	VU
160	CRESTED HAWK EAGLE	<i>Nisaetus cirrhatus</i>	R	LC
161	GREY HEADED FISH EAGLE	<i>Ichthyophaga ichthyaetus</i>	W	NT
162	GREATER SPOTTED EAGLE	<i>Aquila clanga</i>	R	VU
163	BONELLI'S EAGLE	<i>Hieraaetus fasciatus</i>	R	LC
164	BLACK EAGLE	<i>Ictinaetus malayensis</i>	W	LC
165	BOOTED EAGLE	<i>Hieraaetus pennatus</i>	W	LC
166	PALLIED HARRIER	<i>Circus macrourus</i>	W	NT
167	EURASIAN MARSH HARRIER	<i>Circus aeruginosus</i>	W	LC
168	MONTAGU'S HARRIER	<i>Circus pygargus</i>	W	LC
169	PIED HARRIER	<i>Circus melanoleucos</i>	W	LC
<b>Family- FALCONIDAE</b>				
170	RED NECKED FALCON	<i>Falco chicquera</i>	R	NT
171	AMUR FALCON	<i>Falco amurensis</i>	W	LC
172	EURASIAN HOBBY	<i>Falco subbuteo</i>	W	LC
173	PEREGRINE FALCON	<i>Falco peregrines</i>	R	LC
174	COMMON KESTRAL	<i>Falco tinnunculus</i>	W	LC
<b>Family- PODICIPEDIDAE</b>				
175	LITTLE GREBE	<i>Tachybaptus ruficollis</i>	R	LC
<b>Family- ANHINGIDAE</b>				
176	DARTER	<i>Anhinga melanogaster</i>	R	NT
<b>Family- PHALACROCORACIDAE</b>				
177	LITTLE CORMORANT	<i>Phalacrocorax niger</i>	R	LC
178	INDIAN CORMORANT	<i>Phalacrocorax fuscicollis</i>	R	LC
179	GREAT CORMORANT	<i>Phalacrocorax carbo</i>	R	LC
<b>Family- ARDEIDAE</b>				
180	LITTLE EGRET	<i>Egretta garzetta</i>	R	LC
181	GREAT EGRET	<i>Casmerodius albus</i>	R	LC
182	WESTERN REEF EGRET	<i>Egretta gularis</i>	R	LC
183	INTERMEDIATE EGRET	<i>Mesophoyx intermedia</i>	R	LC
184	CATTLE EGRET	<i>Bubulcus ibis</i>	R	LC
185	GREY HERON	<i>Ardea cinerea</i>	W	LC
186	PURPLE HERON	<i>Ardea purpurea</i>	R	LC
187	INDIAN POND HERON	<i>Ardeola grayii</i>	R	LC
188	STRIATED HERON	<i>Butorides striatus</i>	R	LC
189	BLACK CROWNED NIGHT HERON	<i>Nycticorax nycticorax</i>	R	LC
190	YELLOW BITTERN	<i>Ixobrychus sinensis</i>	R	LC
191	CINNAMON BITTERN	<i>Ixobrychus cinnamomeus</i>	R	LC

192	BLACK BITTERN	<i>Dupetor flavicollis</i>	R	LC
	<b>Family- PHOENICOPTERIDAE</b>			
193	GREATER FAMINGO	<i>Phoenicopterus ruber</i>	W	LC
	<b>Family- PHOENICOPTERIDAE</b>			
194	GLOSSY IBIS	<i>Plegadis falcinellus</i>	W	LC
195	BLACK-HEADED IBIS	<i>Threskiornis melanocephalus</i>	R	NT
196	BLACK IBIS	<i>Pseudibis papillosa</i>	R	LC
197	EURASIAN SPOONBILL	<i>Platalea leucorodia</i>	RM	LC
	<b>Family- CICONIIDAE</b>			
198	PAINTED STORK	<i>Mycteria leucocephala</i>	RM	NT
199	ASIAN OPENBILL	<i>Anastomus oscitans</i>	W	LC
200	BLACK STORK	<i>Ciconia nigra</i>	W	LC
201	WOOLLY NECKED STORK	<i>Ciconia episcopus</i>	R	VU
	<b>ORDER- PASSERIFORMES</b>			
	<b>Family- PITTIDAE</b>			
202	INDIAN PITTA	<i>Pitta brachyura</i>	BM	LC
	<b>Family- IRENIDAE</b>			
203	JERDON'S LEAFBIRD	<i>Chloropsis cochinchinensis</i>	R	LC
204	GOLDEN FRONTED LEAFBIRD	<i>Chloropsis aurifrons</i>	R	LC
	<b>Family- LANIIDAE</b>			
205	ISABELLINE SHRIKE	<i>Lanius isabellinus</i>	W	LC
206	BROWN SHRIKE	<i>Lanius cristatus</i>	W	LC
207	BAY BACKED SHRIKE	<i>Lanius vittatus</i>	R	LC
208	LONG TAILED SHRIKE	<i>Lanius schach</i>	R	LC
209	SOUTHERN GREY SHRIKE	<i>Lanius meridionalis</i>	R	LC
	<b>Family- CORVIDAE</b>			
210	RUFIOUS TREEPIE	<i>Dendrocitta vagabunda</i>	R	LC
211	LARGE BILLED CROW	<i>Corvus macrorhynchos</i>	R	LC
212	HOUSE CROW	<i>Corvus splendens</i>	R	LC
213	BLACK HOODED ORIOLE	<i>Oriolus xanthornus</i>	R	LC
214	EURASIAN GOLDEN ORIOLE	<i>Oriolus oriolus</i>	R	LC
215	BLACK WINGED CUCKOO SHRIKE	<i>Coracina melaschistos</i>	W	LC
216	LARGE CUCKOOSHRIKE	<i>Coracina macei</i>	R	LC
217	BLACK HEADED CUCKOOSHRIKE	<i>Coracina melanoptera</i>	R	LC
218	WHITE BELLIED MINIVET	<i>Pericrocotus erythropygius</i>	R	LC
219	SMALL MINIVET	<i>Pericrocotus cinnamomeus</i>	R	LC
220	BLACK DRONGO	<i>Dicrurus macrocercus</i>	R	LC
221	WHITE BELLIED DRONGO	<i>Dicrurus caerulescens</i>		LC
222	ASHY DRONGO	<i>Dicrurus leucophaeus</i>	R	LC
223	WHITE BROWED FANTAIL	<i>Rhipidura aureola</i>	R	LC
224	WHITE THROATED FANTAIL	<i>Rhipidura albicollis</i>	W	LC
225	ASIAN PARADISE FLYCATCHER	<i>Terpsiphone paradisi</i>	R	LC
226	COMMON IORA	<i>Aegithina tiphia</i>	R	LC

227	COMMON WOODSHRIKE	<i>Tephrodornis pondicerianus</i>	R	LC
<b>Family- MUSCICAPIDAE</b>				
228	BLUE ROCK THRUSH	<i>Monticola solitarius</i>	W	LC
229	BLUE CAPPED ROCK THRUSH	<i>Monticola cinclorhynchus</i>	PV	LC
230	MALABAR WHISTLING THRUSH	<i>Myophonus horsfieldii</i>	R	LC
231	ORANGE HEADED THRUSH	<i>Zoothera citrina</i>	R	LC
232	INDIAN BLACKBIRD	<i>Turdus simillimus</i>	R	LC
233	ASIAN BROWN FLYCATCHER	<i>Muscicapa dauurica</i>	W	LC
234	BROWN BREASTED FLYCATCHER	<i>Muscicapa muttui</i>	W	LC
234	RED BREASTED FLYCATCHER	<i>Ficedula parva</i>	W	LC
235	VERDITER FLYCATCHER	<i>Eumyias thalassina</i>	W	LC
236	TIAGA FLYCATCHER	<i>Ficedula albicilla</i>	W	LC
237	ULTRAMARINE FLYCATCHER	<i>Ficedula superciliaris</i>	W	LC
238	GREY HEADED CANARY FLYCATCHER	<i>Culicicapa ceylonensis</i>	W	LC
239	BLACK NAPED MONARCH	<i>Hypothymis azurea</i>	R	LC
240	TICKELL'S BLUE FLYCATCHER	<i>Cyornis tickelliae</i>	R	LC
241	BLUETHROAT	<i>Luscinia svecica</i>	W	LC
242	ORIENTAL MAGPIE ROBIN	<i>Copsychus saularis</i>	R	LC
243	INDIAN ROBIN	<i>Saxicoloides fulicata</i>	R	LC
244	BLACK REDSTART	<i>Phoenicurus ochruros</i>	W	LC
245	COMMON STONECHAT	<i>Saxicola torquata</i>	W	LC
246	PIED BUSHCHAT	<i>Saxicola caprata</i>	R	LC
247	ISABELLINE WHEATER	<i>Oenanthe deserti</i>	W	LC
248	BROWN ROCK CHAT	<i>Cercomela fusca</i>	R	LC
249	DESERT WHEATER	<i>Oenanthe desertii</i>	W	LC
<b>Family- STURNIDAE</b>				
250	CHESTNUT-TAILED STARLING	<i>Sturnus malabaricus</i>	W	LC
251	ROSY STARLING	<i>Sturnus roseus</i>	W	LC
252	BRAHMINY STARLING	<i>Sturnus pagodarum</i>	R	LC
253	ASIAN PIED STARLING	<i>Sturnus contra</i>	R	LC
254	COMMON MYNAH	<i>Acridotheres tristis</i>	R	LC
255	JUNGLE MYNA	<i>Acridotheres fuscus</i>	W	LC
<b>Family- SITTIDAE</b>				
256	INDIAN NUTHATCH	<i>Sitta castanea</i>	R	LC
257	VELVET FRONTED NUTHATCH	<i>Sitta frontalis</i>	R	LC
<b>Family- PARIDAE</b>				
258	GREAT TIT	<i>Parus major</i>	R	LC
259	BLACK LORED TIT	<i>Parus xanthogenys</i>	R	LC
<b>Family- HIRUNDIDIDAE</b>				
260	DUSKY CRAG MARTIN	<i>Hirundo concolor</i>	R	LC
261	COMMON SAND MARTIN	<i>Riparia riparia</i>		LC
262	COMMON HOUSE MARTIN	<i>Delichon urbicum</i>	W	LC
263	PLAIN MARTIN	<i>Riparia paludicola</i>	R	LC
264	BARN SWALLOW	<i>Hirundo rustica</i>	W	LC

265	WIRE TAILED SWALLOW	<i>Hirundo smithii</i>	R	LC
266	RED RUMPED SWALLOW	<i>Hirundo daurica</i>	R	LC
267	STREAK THROATED SWALLOW	<i>Hirundo fluvicola</i>	R	LC
<b>Family- PYCNONOTIDAE</b>				
268	RED VENTED BULBUL	<i>Pycnonotus cafer</i>	R	LC
269	WHITE BROWED BULBUL	<i>Pycnonotus luteolus</i>	R	LC
<b>Family- CISTICOLIDAE</b>				
270	ZITTING CISTICOLA	<i>Cisticola juncidis</i>	R	LC
271	GREY BREASTED PRINIA	<i>Prinia hodgsonii</i>	R	LC
272	ASHY PRINIA	<i>Prinia socialis</i>	R	LC
273	PLAIN PRINIA	<i>Prinia inornata</i>	R	LC
274	JUNGLE PRINIA	<i>Prinia sylvatica</i>	R	LC
<b>Family- ZOSTEROPIDAE</b>				
275	ORIENTAL WHITE EYE	<i>Zosterops palpebrosus</i>	R	LC
<b>Family- SYLVIDAE</b>				
276	BLYTH'S REED WARBLER	<i>Acrocephalus dumetorum</i>	R	LC
277	CLAMOROUS REED WARBLER	<i>Acrocephalus stentoreus</i>	W	LC
278	HUME'S WARBLER	<i>Phylloscopus humei</i>	W	LC
279	GREENISH WARBLER	<i>Phylloscopus affinis</i>	W	LC
280	BOOTED WARBLER	<i>Hippolais caligata</i>	W	LC
281	WESTERN CROWNED WARBLER	<i>Phylloscopus occipitalis</i>	W	LC
282	SYKES'S WARBLER	<i>Hippolais rama</i>	W	LC
283	COMMON TAILORBIRD	<i>Orthotomus sutorius</i>	R	LC
284	COMMON CHIFFCHAFF	<i>Phylloscopus collybita</i>	W	LC
285	SULPHUR BELLIED WARBLER	<i>Phylloscopus griseolus</i>	W	LC
286	TICKELL'S LEAF WARBLER	<i>Phylloscopus affinis</i>	R	LC
287	ORPHEAN WARBLER	<i>Sylvia crassirostris</i>	W	LC
288	LESSER WHITE THROAT	<i>Sylvia curruca</i>	W	LC
289	TAWNY BELLIED BABBLER	<i>Dumetia hyperythra</i>	R	LC
290	YELLOW EYED BABBLER	<i>Chrysomma sinense</i>	R	LC
291	COMMON BABBLER	<i>Turdoides caudatus</i>	R	LC
292	LARGE GREY BABBLER	<i>Turdoides malcolmi</i>	R	LC
293	JUNGLE BABBLER	<i>Turdoides striatus</i>	R	LC
<b>Family- ALAUDIDAE</b>				
294	SINGING BUSHLARK	<i>Mirafra cantillans</i>	R	LC
295	INDIAN BUSHKARK	<i>Mirafra erythroptera</i>	R	LC
296	ASHY CROWNED SPARROW LARK	<i>Eremopterix grisea</i>	R	LC
297	RUFIOUS TAILED LARK	<i>Ammonomanes phoenicurus</i>	R	LC
298	GREATER SHORT TOED LARK	<i>Calanadrella brachydactyla</i>	R	LC
299	SYKES'S LARK	<i>Galerida deva</i>	R	LC
300	ORIENTAL SKYLARK	<i>Alauda gulgula</i>	R	LC
<b>Family- NECTARINIDAE</b>				
301	THICK BILLED FLOWERPECKER	<i>Dicaeum agile</i>	R	LC
302	PURPLE RUMPED SUNBIRD	<i>Nectarinia zeylonica</i>	R	LC

303	PURPLE SUNBIRD	<i>Nectarinia asiatica</i>	R	LC
<b>Family- PASSERIDAE</b>				
304	HOUSE SPARROW	<i>Passer domesticus</i>	R	LC
305	CHESTNUT SHOULDERED PETRONIA	<i>Petronia xanthocollis</i>	R	LC
306	WHITE WAGTAIL	<i>Motacilla personata</i>	W	LC
307	WHITE BROWED WAGTAIL	<i>Motacilla maderaspatensis</i>	R	LC
308	CITRINE WAGTAIL	<i>Motacilla citreola</i>	W	LC
309	YELLOW WAGTAIL	<i>Motacilla thunbergi</i>	W	LC
310	GREY WAGTAIL	<i>Motacilla cinerea</i>	W	LC
311	PADDYFIELD PIPIT	<i>Anthus rufulus</i>	R	LC
312	BLYTH'S PIPIT	<i>Anthus godlewskii</i>	W	LC
313	OLIVE-BACKED PIPIT	<i>Anthus hodgsoni</i>	W	LC
314	TREE PIPIT	<i>Anthus trivialis</i>	R	LC
315	BAYA WEAVER	<i>Ploceus philippinus</i>	R	LC
316	RED AVADAVAT	<i>Amandava amandava</i>	R	LC
317	INDIAN SILVERBILL	<i>Lonchura malabarica</i>	R	LC
318	SCALY BREASTED MUNIA	<i>Lonchura punctulata</i>	R	LC
319	WHITE RUMPED MUNIA	<i>Lonchura striata</i>	R	LC
320	BLACK HEADED MUNIA	<i>Lonchura malacca</i>	R	LC
<b>Family- FRINGILLIDAE</b>				
321	COMMON ROSEFINCH	<i>Carpodacus erythrinus</i>	W	LC
322	CRESTED BUNTING	<i>Melophus lathami</i>	R	LC
323	GREY NECKED BUNTING	<i>Emberiza buchanani</i>	W	LC
324	BLACK HEADED BUNTING	<i>Emberiza melanocephala</i>	W	LC
325	RED HEADED BUNTING	<i>Emberiza bruniceps</i>	W	LC

Taxonomically classification of diversity records of birds.

LC- Least Concern, NT- Near Threaten, VU- Vulnerable ,EN- Endangered. R- Wide Spread Resident, W- Wide Spread Winter Visitors, PV- Passage Visitor, RM- Residential Migrant, BM- Breeding Migrant, V- Vagrant.

Some birds of prey that are rare for the region are recorded annually in the habitat designated for study, and some have been observed only once or twice during this period, including the Greater Spotted Eagle, Indian Spotted Eagle, Osprey, Peregrine Falcon, Amur Falcon, Eurasian Hobby, Pied Harrier, Egyptian vulture, Black Eagle and Crested Goshawk. The habitat designated for the study consisted mainly of some rare birds in forests and grassland including Yellow Legged Button Quail, Common Quail, European Roller, Stork Billed Kingfisher, Blue Cheek Bee Eater, Short Eared Owl, Orange Breasted green pigeon, southern grey shrike, Black Winged cuckoo shrike, Malabar Whistling Thrush and thick Billed flower pecker. Of the 325 bird species recorded, 115 widespread winter visitors (W), 190 widespread residents (R), 7 passage visitors (PV), 9 breeding migrants (BM) and 4 resident migrants (RM). According to IUCN's Red Data List, 14 are in the Near Threatened includes Ferruginous Duck, Painted Stork, Black-headed Ibis, Oriental Darter, Great Thick-knee, River Lapwing, Eurasian Curlew, Black-tailed Godwit, Curlew Sandpiper, River Tern, Pallid Harrier, Grey-headed Fish-eagle, Red-headed Falcon, Alexandrine Parakeet, 5 in the Vulnerable these are Common Pochard, Asian Woollyneck, Indian Skimmer, Indian Spotted Eagle, Greater Spotted Eagle, and 2 in the Endangered category includes Black-bellied Tern and Egyptian Vulture. During the bird habitat study from 2009 to 2021, 325 different bird species were recorded in 8 talukas of Yavatmal district. Visited some important habitats in other talukas for bird watching and in future all talukas in Yavatmal district are to be explored for bird diversification. The reservoirs on which most bird species are found are: Nilona Dam, Bembala Dam, Borgaon Dam, Jamwadi Dam, Waghadi Dam and Pathrad Gole. The forests where bird diversity is found include Chausala, Bahiram and Durg. The most commonly recorded grassland bird species are Echori, Bembala and Durg. Records of 325 bird species between 2009 and 2021 are very important for Yavatmal district. Many talukas are still under study and visit session is underway. But due to human-

centered development, nature's forest and reservoirs are depleting the grassland area and are on the verge of extinction. This situation still needs to change. Only then will the habitat be secure and the bird diversity and numbers increase. Today, this census has given a new identity to Yavatmal in the state. In future, new entries will increase it, so dams like Bembala Nilona and Borgaon will become bird hotspots. It is hoped that the number of bird species will increase in future.

## References

- Abdulali,H.(1972), Checklist of Birds of Maharashtra. Bombay Natural History society, Mumbai.
- Ali, S. *The book of Indian birds. (13th Edition). Bombay Natural History Society. 2012; 239 Oxford University Press.*
- Bibby C.J., N.D. Burgess & D.A. Hill (1992). *Bird Census Techniques*. Academic Press, London, 67–84 pp.
- Daniels, R.J.R. (1997). *A Field Guide to the Birds of South-Western India*. New Delhi: Oxford University Press, 217pp.
- Grimmett, R., C. Inskipp & T. Inskipp, *Birds of the Indian Subcontinent*. Oxford University Press, New Delhi. 2012; 528pp.
- IUCN - ENVIS Center, IUCN Red List of Threatened Species.2018; IUCN category.
- Kazmierczak, K. (2000). *A Field Guide to the Birds of the Indian Subcontinent*. A & C Black Publishers Ltd., Pica press, 352pp.
- Kazmierczak, K. *A Field Guide to the Birds of the Indian Subcontinent*. A & C Black Publishers Ltd., Pica press. 2012; 352pp.
- Kumar, A., J.P. Sati, P.C. Tak & J.R.B. Alfred . *Handbook on Indian Wetland Birds and their Conservation*. Zoological Survey of India. 2005; 218pp.
- Grewal B., Harvey B. and Pfister O. *Birds of India*. Periplus Editions (HK) Ltd. 2011; 512 pp
- Steward R.E. Jr., (1999). *Technical aspects of wetlands: Wetlands as bird habitat*. United States Geologic Water Supply Paper, pp. 24-25.

