

# The Water Birds of Gidhwa & Parsada Wetlands, Nandghat, Bemetara, Chhattisgarh (India)

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**Abstract-** Birds Community of Gidhwa & Parsada Wetlands in Nandghat, Bemetara District, and Chhattisgarh State was studied during February 2013 to March 2014. The methodology followed was mainly observation using binocular and collected information with the help local bird watcher of those particular wetlands. A total 143 species of birds, belonging to 48 families were recorded from the area during the period. Among them 11 migrants, 26 local migrants and are 106 resident birds. Highest number of birds was recorded in mid-month of October to Post January, and the lowest was observed in month of April - June. Abundance of birds has recorded with appropriate status i.e. M, LM & R. Habitat disturbance through multi utilization of wetlands, many factors, which threatened the Gidhwa and Parsada wetlands ecosystem and the bird population, poaching of birds, Gidhwa and Parsada wetlands has slightly biomagnifications, introduction of bi-carbonates due to regular flow of agricultural activities, continuous uses of detergent cause Eutrofication. Birds play vital role in pollination, dispersal of seeds, predatory on insects as scavenger, food chain balancing, and as bio-indicators of fresh & healthy ecology or environment. All the ponds are interconnected with enough food materials and specific habitat for migratory birds. With the coined reference of species diversity for promoting this place as ecotourism site, Important Birds Area (IBA), facilitation center for breeding of birds, these are some main theme, in which birds comes in healthy wetlands in and around the world. The alternative source for increasing visiting birds per year through introducing of native floral species or provide them homely habitat. This paper calls for some basic information about migratory, local migrants, resident birds and conservation of avian habitat from human-elementary generated interference on birds movements.

**Index Terms-** Birds, Migration, Wetlands, Ecosystem, Conservation Problem and issues.

## I. INTRODUCTION

Wetlands are extremely important areas throughout the world for wildlife protection, recreation, sediment control, flood prevention (1). Wetlands are important bird's habitats and birds use them for feeding, roosting, nesting and rearing their young (2, 3). In Gidhwa and Parsada Wetlands are mainly used for agriculture, aquaculture, reclamation for harboring and irrigation purposes. In the same field, Kerala Wetlands are highly used for industrial purpose, disposition the waste materials, discharging the industrial effluents and municipal waste water,

wood seasoning, dumping dredged soil, coir retting and for fishing (4).

## II. STUDY SITE

The Gidhwa and Parsada Wetlands is one of the wonderful places to watch the resident and migratory birds, being near from both cities of Raipur and Bilaspur, Chhattisgarh. The Gidhwa and Parsada Wetland is situated in coordinate of 21°50'25.6" N, 081°46'29.9" E and 21°51'10.9" N, 081°49'23.2" E respectively in Nandghat, Bemetara District, Chhattisgarh (India). The distance from the district head quarter is around 70 km.

## III. MATERIALS AND METHODS

Gidhwa and Parsada Wetland is one of the most important wetlands in the south eastern central zone and Raipur plains agro climatic zone, because thousands of ducks and other migrants are choosing as their wintering during post monsoon season. This Wetland covers approximately 06 km radius from Gidhwa village. This site has maximum inter-connected ponds in Nandghat Panchyats. Gidhwa and Parsada has total water logged area is 180 ha with muddy banks. The major soil type of the site is blackish and fertile soil: are accumulations of deposition of decayed biomass in that particular field. Distribution of soil types is mainly clay, sandy, loamy and silicate. The Pond/Tank has enough food for the various species of birds. As most depend on the aquatic vegetation like; hydrilla, sage grasses, lotus and green algae are increased because of Eutrofication. The various insects that are found in the muddy land, in this manner it is a perfect habitat for feeding, breeding and as temporary residency. The habitats has maximum littoral zone: it is very essential for any aquatic succession. Present study actually based on avian fauna of Mavoor wetland, are very few, except the regular Asian Water fowl Census since past five years and Paper on diving behavior of Cormarants and Darter (5).

Systematic list of the birds of this region is lacking. Hence the present study documented the avian fauna of this wetlands from mainly direct observation and local informer interaction about counting status of resident and migratory birds from post monsoon September 2013 to post February 2014. Study area visited 5 times in a month, the observation were made between 0600 hrs to 1200 hrs morning and 0400 hrs to 0600 hrs evening and birds were identified. The abundance status of birds are categorized into common (Com) -seen on most of the visited, uncommon (Uncom) -seen in a few visits and Rare (Ra) -seen once or twice, Residential status of species is classified into

Resident (R), local movement (LM), Migrants (M) and Straggler (S). Some birds are residents and they are breeding in the different habitat; of Chhattisgarh, but Gidhwa and Parsada Wetland they are seen only for limited time and as migrants, hence they are included in category of local migrants or movements. Winter visiting from the other region of Indian Sub-continent and Central Asian Countries are included in the category of Migratory.

#### IV. RESULTS

A total of 143 species of birds belonged to 48 families, during study all recorded avian fauna has classified into Resident birds, Local Movement birds, Migratory birds, Straggler, Common and Uncommon (Table No.1 and Plate 1), were recorded from the Gidhwa and Parsada Wetlands.

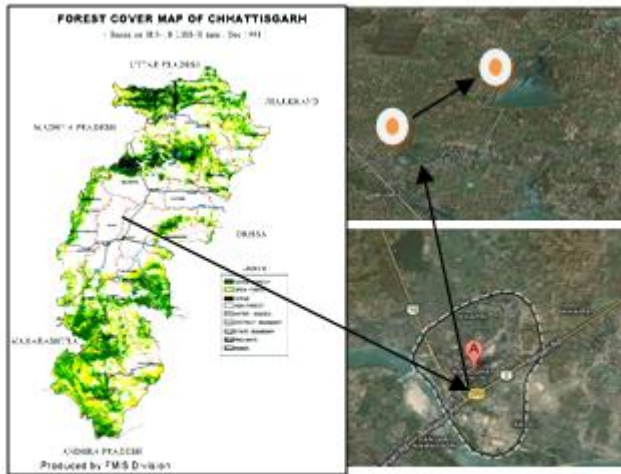


Fig. 1 Study area of Gidhwa & Parsada wetlands

Table No.: 1 Checklist birds recorded in Gidhwa and Parsada Wetlands with their residential movement status.

S. No.	Family	Local Name	Common Name	Scientific Name	Abundance	Status
1	Accipitridae	Cheel	Black Kite	<i>Milvus migrans</i>	Uncom	R/LM
2		Kapassi	Black shouldered kite	<i>Elanus caeruleus</i>	Uncom	R
3		Kaljanga	Greater spotted Eagle	<i>Aquila Clanga</i>	Uncom	R
4		Cheepka	Shikra	<i>Accipiter badius</i>	Uncom	R
5		Ragar	Steppe Eagle	<i>Aquila Nipalensis</i>	Uncom	R
6		Teesa	White-eyed Buzzard	<i>Butastur teesa</i>	Uncom	R
7	Alaudidae	Diyora	Ashy-crowed sparrow -lark	<i>Eremopterix griseus</i>	Ra	R/LM
8		Asiyai chandol	Eurasian Skylark	<i>Alauda arvensis</i>	Uncom	R
9		Aagiya	Indian Bush-lark	<i>Mirafra erythroptera</i>	Com	R
10		Jendoka agiya	Jerdons bushlark	<i>Mirafra affinis</i>	Ra	LM
11		Aagiya	Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	Uncom	R
12		Ageen	Singing Bushlark	<i>Mirafra cantillans</i>	Com	R
13	Alcedinidae	Albakh, kilkila	Lesser pied kingfisher	<i>Ceryle rudis</i>	Uncom	R
14		Chhota kilkila	Small blue kingfisher	<i>Alcedo atthis</i>	Com	R
15		Kilkila	White Throated King fisher	<i>Halcyon smyrnensis</i>	Uncom	R

16	Anatidae	Chakwa	Brahmny selduck	<i>Tadorna ferruginea</i>	Uncom	LM
17		Nakta	Comb Duck	<i>Sarkidiornis melanotos</i>	Uncom	R/LM
18		Lal Sir	Common Pochard	<i>Aythya ferina</i>	Ra	LM
19		Chhoti Murgabi	Common Teal	<i>Anus crecca</i>	Ra	M
20		Girja	Cotton teal	<i>Nettapus coromandelianus</i>	Uncom	LM
21		Patari, Chhota lal sir	Eurasian Wigeon	<i>Anas Penelope</i>	Uncom	LM
22		Badi silhi	Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	Com	R
23		Bekhur	Gadwall	<i>Anus strepera</i>	Ra	M
24		Kheera	Garganey	<i>Anas querquedula</i>	Uncom	R
25		Gugral	Indian spot billed duck	<i>Anas poecilorhyncha</i>	Uncom	R
26		Selhi	Lesser whistling duck	<i>Dendrocygna javanica</i>	Uncom	R
27		Sinkh Par	Northern Pintail	<i>Anus acuta</i>	Ra	M
28		Tidari Punna	Northern Shoveller	<i>Anus clypeata</i>	Ra	M
29		Lalchonch	Red-crested Pochard	<i>Netta rufina</i>	Ra	LM
30		Ablakh	Tufted duck	<i>Aythya fulingula</i>	Uncom	M
31		Ablakh	Tufted pochard	<i>Aythya fulingula</i>	R	LM
32	Apodidae	Samanya babila	House Swift	<i>Apus apus</i>	Com	R
33	Ardeidae	Kala Bagula	Black bittern	<i>Dupetor flavicollis</i>	Uncom	LM
34		Quak Quak	Black Crowed Night heron	<i>Nycticorax nycticorax</i>	Uncom	R
35		Waak	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Uncom	LM
36		Gay Bagula	Cattle Egret	<i>Bubulcus cromandus</i>	Com	R
37		Lal Bagula	Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>	Uncom	LM
38		Mangal Bagula	Great Erget	<i>Ergetta alba</i>	Uncom	R/LM
39		Nari, Anjan	Grey Heron	<i>Ardea cinerea</i>	Uncom	LM
40		Blind Bagula	Indian Pond Heron	<i>Ardeola grayii</i>	Com	R
41		Patangkha	Intermediate Egret	<i>Egretta intermedia</i>	Com	R
42		Chhota Bagula	Little Bitterern	<i>Ixobrychus minutus</i>	Com	R
43		Karchiya Bagula	Little Erget	<i>Ergetta garzetta</i>		
44		Red Anjan	Purple Heron	<i>Ardea purpurea</i>	Uncom	LM
45		Jun Bagula	Yellow Bittern	<i>Ixobrychus sinensis</i>	Com	R
46	Bucerotidae	Danesh	Indian Grey Hornbill	<i>Ocyrceros birostris</i>	Com	R
47	Capitonidae	Chhota Basant	Coppersmith Barbet	<i>Megalaima haemacephala</i>	Uncom	R
48	Caprimulgidae	Bhartiya chippak	Indian Nightjar	<i>Caprimulgus indicus</i>	Uncom	R
49	Charadriidae	Bada merwa	Common Ringed Plover	<i>Charadrius hiaticula</i>	Uncom	R
50		Collarwala Merwa	Kentish Plover	<i>Charadrius alexandrinus</i>	Uncom	R
51		Merwa	Little Ringed Plover	<i>Charadrius dubius</i>	Uncom	R
52		Titori ,Titi	Red –Wattled	<i>Venellus indicus</i>	Com	R

53		River titori	Lapwing River Lapwing	<i>Venellus duvauclyi</i>	Uncom	R
54		Jhhedri	Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	Uncom	LM
55	Chloropseidae	Harewa	Blue-winged leafbird	<i>Chloropsis cochinchinensis</i>	Uncom	R
56		Harewa	Golden-fronted Leafbird	<i>Chloropsis aurifrons</i>	Uncom	R
57	Ciconiidae	Gangala,Ghonghill	Asian open bill	<i>Anastomus oscitans</i>	Uncom	LM
58		Hazi lak-lak	Woody-necked stork	<i>Ciconia episcopus</i>	Ra	LM
59	Cisticolidae	Kali Fudki	Ashy Prinia	<i>Prinia socialis</i>	Uncom	R
60		Fudki	Plain prinia	<i>Prinia inornatca</i>	Com	R
61	Columbidae	Gugi	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	Com	R
62		Padki	Laughing dove	<i>Streptopelia Senegalensis</i>	Com	R
63		Ghughu	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Uncom	R
64		Seroti fakhta	Red Collared Dove	<i>Streptopelia tranquebarica</i>	Com	R
65		kabutar	Rock pigeon	<i>Columba livia</i>	Com	R
66		Chitroka	Spotted dove	<i>Streptopelia chinensis</i>	Com	R
67	Coraciidae	Neelkanth	Indian roller	<i>Coracias benghalensis</i>	Com	R
68	Corvidae	Desi kowa	House Crow	<i>Corvus splendens</i>	Com	R
69		Jungli Kowa	Jungle Crow	<i>Corvus macrorhynchos</i>	Uncom	R
70	Cuculidae	Koel	Asian koel	<i>Eudynamys scolopacea</i>	Com	R
71		Mahok	Greater Coucal	<i>Centropus sinensis</i>	Uncom	R
72	Dicruridae	Beehraj	Greater racket tailed drongo	<i>Dicrurus paradiseus</i>	Uncom	R
73	Diguridae	Jangle Kotwal	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Uncom	R
74		Kolsa,Kotwal	Black Drongo	<i>Dicrurus macrocercus</i>	Com	R
75	Estrildidae	Charga	Indian Silverbill	<i>Euodice malabarica</i>	Uncom	R
76		Lal muniya	Red avadavat	<i>Amandava amandava</i>	Uncom	R
77		Teliya munia	Scaly-breasted Munia	<i>Lonchura punctualata</i>	Uncom	R
78	Glareolidae	Nukri	Indian courser	<i>Cursorius coromandelicus</i>	Uncom	R
79		Chhota tejpar	Small pranticol	<i>Glareola lactea</i>	Uncom	M
80	Hirundinidae	Masjid ababil	Red-rumped Swallow	<i>Hirundo daurica</i>	Uncom	R
81	Jacanidae	Jal pipi	Bronze Winged jacana	<i>Metopidius indicus</i>	Uncom	R
82		Jal pipi	Pheasant-tailed jacana	<i>Hydrophasianus chirurgus</i>	Uncom	R
83	Laniidae	Pachnaak	Bay-backed shrik	<i>Lanius vittatus</i>	Uncom	R
84		Kajla latora	Long-tailed Shrike	<i>Lanius schach</i>	Uncom	R
85	Meropidae	Patringa	Green- Bee eater	<i>Merops orientalis</i>	Com	R
86	Monarchidae	Sultan bulbul	Asian paradise	<i>Terpsiphone</i>	Uncom	R

			flycatcher	<i>paradisi</i>		
87		Saleti khanjan	Grey wegtail	<i>Motacilla cinerea</i>	Uncom	R
88	Motacillidae	Hari charchari	Olive backed pipit	<i>Anthus hodgsoni</i>	Com	R
89		Khet chachari	Peddy field pipit	<i>Anthus rufulus</i>	Uncom	R
90		Dhoban	White Wegtail	<i>Motacilla alba</i>	Ra	M
91		Pani-Ka-Pilkiya	Yellow Wegtail	<i>Motacilla flava</i>	Ra	M
92	Motasillidae	Peetsir pilkiya	Citrine Wagtail	<i>Motacilla citreola</i>	com	R
93		Pilkiya	Western yellow wagtail	<i>Motacilla flava</i>	Uncom	M
94	Muscicapidae	Jhakki	Asian Brown flycatcher	<i>Muscicapa dauurica</i>	Uncom	R
95		Hussaini Pidda	Blue Throat	<i>Luscinia svecica</i>	Ra	M
96		Kallhuri	Indian black robbin	<i>Saxicoloides fulicola</i>	Com	R
97		Dahiyal	Oriental Magpie Robin	<i>Copsychus saularis</i>	Uncom	R
98	Nectariniidae	phool sunghni	Purple sunbird	<i>Nectarinia asiatica</i>	Com	R
99	Oriolidae	Peelak	Black hooded Oriole	<i>Oriolus xanthornus</i>	Uncom	R
100		Peelak	Eurasian Golden Oriole	<i>Oriolus kundoo</i>	Uncom	R
101	Paridae	Peela Ramgangaar	Black lored yellow Tit	<i>Parus xanthogenys</i>	Uncom	LM
102	Passeridae	Gauriya	House sparrow	<i>Passer domesticus</i>	Com	R
103		Razi	Yellow Throated Sparrow	<i>Petronia xanthocollis</i>	Uncom	R
104	Phalacrocoracidae	Ghoghloor ,Bada jal kowa	Great Cormorant	<i>Phalacrocorax carbo</i>	Uncom	R/LM
105		Chhota Jal kowa	Little Cormorant	<i>Phalacrocorax nigar</i>	Com	R
106	Picidae	Sunahra Katfodwa	Black rumped Flamback	<i>Dinopium benghalense</i>	Uncom	R
107		Bada kathfodwa	Greater flameback	<i>Chrysocolaptes lucidus</i>	Com	R
108	Ploceidae	Baya	Baya weaver	<i>Ploceus philippnus</i>	Uncom	R
109	Podicipedidae	Dubdubi	Great Crested Grebe	<i>Podiceps cristantus</i>	Uncom	R
110		Dubdubi	Little Grebe	<i>Tachybaptus ruficollis</i>	Uncom	R/LM
111	Psittacidae	Tota	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Com	R
112		Tuiya tota	Plum-headed parakeet	<i>Psittacula cyanocephala</i>	Uncom	R/LM
113	Pycnonotidae	Kala Bulbul	Red-Vented Bulbul	<i>Pycnonotus cafer</i>	Com	R
114	Rallidae	Jal Bater	Brown Crane	<i>Porjana akool</i>	Com	R
115		Jal Murgi	Comman Moorhen	<i>Gallinula chloropus</i>	Uncom	R
116		Jalmurgi	Common moorhen	<i>Gallinula chloropus</i>	Uncom	R
117		Aari	Eurasian coot	<i>Fulica atra</i>	Uncom	R
118		Dasari Arri	Euroasian Coot	<i>Fulica atra</i>	Uncom	M
119		Jamuni vanmurgi	Purple Swamphen	<i>Porphyrio poliocephalus</i>	Uncom	R
120		Jalmurgi	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Uncom	R
121	Recurvirostridae	Gajpaon	Black-winged	<i>Himantopus</i>	Com	R

			Stilt	<i>himantopus</i>		
122	Rhipiduridae	Chakdil ;Nachhan	White-browed fantail	<i>Rhipidura aureola</i>	Ra	R/LM
123	Scolopacidae	Jalrank	Common sandpiper	<i>Actitis hypoleucos</i>	Uncom	R
124		Timtima	Common Greenshank	<i>Tringa nebularia</i>	Com	R
125		Chhota butan	Common redshank	<i>Tringa totanus</i>	Uncom	R
126		Jalrank	Common sandpiper	<i>Actitis hypoleucos</i>	Com	R
127		Samudri Jalrank	Dunlin	<i>Calidris alpina</i>	Uncom	R/LM
128		Hara retal chaha	Green Sandpiper	<i>Tringa ochropus</i>	Uncom	R
129		Chhota panlovva	Little Stint	<i>Calidris minuta</i>	Uncom	LM
130		Chambhi chaha	Marsh Sandpiper	<i>Tringa stagnatilis</i>	Uncom	R
131		Chhupka	Wood sandpiper	<i>Tringa glareola</i>	Uncom	R
132	Sturnidae	Albakh myna	Asian peid starling	<i>Grawpila Contra</i>	Com	R
133		Brahming Myna	Brahming Starling	<i>Temenuchus pogodarum</i>	Uncom	R
134		Desi maiyna	Common myna	<i>Acriclotheres tristis</i>	Com	R
135		Myna	Rosy Starling	<i>Sturnus rosesus</i>	Ra	M
136	Sylviidae	Podna	Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i>	Uncom	R
137	Threskiornithidae	Kavari	Glossy Ibis	<i>Plegadis falcinellus</i>	Uncom	R
138		Kala bajhha	Indian black Ibis	<i>Pseudibis papillosa</i>	Uncom	R
139		Safed bajhha	White Ibis	<i>Threskiornis melanocephalus</i>	Uncom	R
140	Timaliidae	Chilchil	Common Babbler	<i>Turdoides caudata</i>	Uncom	R
141		Saatbhai	Jungle Babbler	<i>Turdoides striatus</i>	Com	R
142		Saatbhai	Large Grey Babbler	<i>Turdoides malcolmi</i>	Com	R
143	Upupidae	Hudhud	Common Hoopoe	<i>Upupa epops</i>	Uncom	R



**Fig.: 1 Birds eye view of Gidhwa Dam and Tank**



**Fig.: 2 Birds eye view of Parsada Dam and Tank**



**Fig.: 3 Northern pintail in Gidhwa Tank**



**Fig.: 4 Whistling duck in Parsada Tank**

Of these migratory birds, Gidhwa and Parsada wetlands has biomagnifications (deficiency of oxygen in water); property caused by access amount of aquatic flora and fauna. Introduction of bi-carbonates due to regular flow of agricultural activities, continuous uses of detergent cause Eutrofication.

Highest numbers of birds were observed during mid-month of October to Post January and lowest in post January to upcoming summer. Little Erget *Ergetta garzetta*, Great Erget *Ergetta alba*, Little Cormorant *Phalacrocorax nigar*, Great Cormorant *Phalacrocorax carbo*, Black Crowed Night heron *Nycticorax nycticorax*, Lesser whistling duck *Dendroeygna javanica*, Cotton teal *Nettapus coromandelianus*, Purple Swamhen *Porphyrio poliocephalus*, Bronze Winged jacana *Metopidius indicus*, Red-Watted Lawping *Venellus indicus*, Spotted dove *Streptopelia chinensis*, Laughing dove *Streptopelia Senegalensis*, Blue cheeked Bee eater *Merops persicus*, House sparrow *Passer domesticus*, Comman myna *Acriclotheres tristis*, Asian peid starling *Grawpila Contra*, Black Drongo *Dicrurus macrocercus*, House Crow *Corvus splendens*, Euroasian Coot *Fulica atra*, Common Moorhen *Gallinula chloropus*, Little

Grebe *Tachybaptus ruficollis*, Indian Pond Heron *Ardeola grayii*, Red-crested Pochard *Netta rufina*, etc were the most abundant resident, local movement and migrant birds species found in the Gidhwa and Parsada Wetlands.

## V. DISCUSSION

Lower species richness of birds in this area is attributed due to habitat disturbance through multi utilization status of wetlands (6). As reported earlier from the Mavoor, Keralian paper authors, as the highest number of birds reported mid-month of October to Post January and there was reduction in population size and movement during month of April - June. Many factors, which threatened the Gidhwa and Parsada wetlands ecosystem and the bird population, were poaching of birds. Birds were hunted using fishing net recorded. Birds use wetlands as source of drinking water and for feeding, resting, nesting, shelter and social interaction (7). Pollution mainly from chemical is the major threats faced by birds in ecosystem, due to continuous uses of bi-carbonates, fertilizer and other substances in water body.

This area is one of the major feeding grounds of ducks, terns and other resident species. The local people use water that has leached out from this tank for agriculture, aquaculture, fishing activities and there by this polluted water would reach all the adjoining bird visiting areas. During Post January to upcoming summer season, climate and water status of wetlands also affects the population size of resident, local movement and migrant birds. Uncontrolled fishing depletes the food source of wetland birds and regular removal of water from water body causes opening of littoral zone of aquatic ecosystem, which results destruction of green food sources of any aquatic zone; affecting the food source for birds.

Habitat disturbance through many factors, which threatened the Gidhwa and Parsada wetlands ecosystem. Gidhwa and Parsada wetlands has biomagnifications, introduction of bi-carbonates due to regular flow of agricultural activities, continuous uses of detergent cause Eutrofication, Birds play vital role in pollination, dispersal of seeds, predatory on insects as scavenger, food chain balancing, and as bio-indicators of fresh & healthy ecology or environment. All the ponds are interconnected with enough food materials and specific habitat for migratory birds. With the coined reference of species diversity for promoting this place as ecotourism site, Important Birds Area (IBA), facilitation center for breeding of birds, these are some main theme, in which birds comes in healthy wetlands in and around the world. This paper calls for some basic information migratory, local migrants, resident and conservation of avian habitat from human-elementary generated interference on birds movements. The alternative source for increasing visiting birds per year through introducing of native floral species or provide them homely habitat. If floriculture will adapted upside the bund using suitable species then many birds species whose only feed insects will surely appear around the pond and also support food chain of terrestrial ecology.

## VI. CONCLUSION

The study proved that, if the present ecological characteristics of this wetland continuous, the birds were unable to inhabit this habitat in the immediate future. Proper awareness class regarding the importance of birds and vital role in daily life to the local peoples through different massive programs will ultimately help the protection of birds of this region. Being this area is one the main habitat of wetland birds in polar zone of India, coastal region, and sub-continent coastal zone of Asia and it should be declared as a protected area.

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Our purpose to this research paper on “**The Water Birds of Gidhwa & Parsada Wetlands**” is to create general awareness about birds found in Bemetara district of Chhattisgarh State. Also the Gidhwa wetlands has suitable habitat for seasonal migrants and due to richness of avifauna species. With the sense of high resolve & reverence, the authors express thanks to our sincere &

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