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NOTES ON NATURAL HISTORY

A Report on Resident, Local Migratory and Migratory Water fowl Diversity in Mayurbhanj District, Odisha, Eastern India.

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Study Area: Mayurbhanj District, Odisha.

Coordinates: 21°16' to 22°34' N; 85°40' to 87°11' E

Key words: Water bodies, Water birds

Introduction:

Water birds play a major part in our ecosystem. Besides ecological, this group has various social and economic importance for which species should be conserved on a priority basis. Mayurbhanj is the district of Orissa inhibiting great wildlife diversity, where Similipal National Park is covering the largest area. This is a part of Eastern Ghat which is endowed with rich biodiversity. This study was conducted to know the diversity of waterfowl in this particular area as most of which are seasonal migratory. In this article, I am presenting the list of water fowls time to time observed by me and my staff in the study area.

Location under Watched for Migratory Birds:

In the Mayurbhanj district, there are many water bodies, which attract migratory, local migratory and resident birds and also play a vital role in irrigation and pisciculture. We surveyed, a total of 17 water bodies comes under three divisions (Baripada, Karanjia and Rairangpur). We tabulated the species mainly from November 2010 to May 2011. A Direct Visual count method (with binoculars) was employed to list the bird species and where possible an actual count was taken. Where there were a large flock, an estimate (up to the nearest 100 individuals) was made. Each study site was visited for a minimum of three times in three different dates to record variety of water bird species visiting to the water bodies. Birds were identified following Grimmett *et. al.*, (2001) and their status following Ali & Ripley (2001). The number

of bird species including the number of species individuals observed in each water body has been tabulated in the following table (Table-1).

Table-1: Over view of water bodies with the numbers of species and water birds observed during Study Period.

#	Waterbody	Total Species observed	Total water birds observed	Visit of Season	Total days expent
1	Jambira Reservoir	17	630	Jan & Feb	04
2	Haladia Reservoir	21	1519	Jan & Feb	04
3	Kala Dam	22	270	Nov & Jan	03
4	Badjod Reservoir	23	165	Dec & May	04
5	Purunapani Pond	12	23	April & May	04
6	Muktapur pond	15	13	Jan & Feb	03
7	Haladipada pond	15	23	Feb & March	03
8	Dariha Marsh	18	56	March & May	04
9	Kalama Pond	17	22	March	03
10	Rajabandha Reservoir	16	50	May	03
11	Chhamundia Dam	18	37	Dec	03
12	Salarpada Dam	17	88	Dec	03
13	Rajabandha	20	110	Nov & Dec	03
14	Kushpada Pond	19	42	April	05
15	Thakuramunda pond	13	36	April & May	03
16	Rani Bandha	10	24	March	03
17	Raja Bandha	22	31	March	03

Our Tabulated Observations:

Total 46 species from 11 families (Figure 1), of waterbirds were recorded from Mayurbhanj district. Out of which, maximum birds are recorded from the Badjod Reservoir (23) and very few birds are sighted in the Rani Bandha (10) species. Species distribution according to a water body is listed in the Table: 1 A checklist is given in Table-2. Migratory birds were found in 18 areas, local migratory birds in 01 area and resident birds in 17 areas. In other areas like the Baldiha dam, Sunei dam, Suleipat dam, Haldia dam and Bankbal dam the submerged vegetation was more luxuriant which attracted a number of migratory birds. The area of Suleipat and Bankbal dam is more in comparison to the other dams covered during our survey. Hence numbers of birds were sighted.

Figure 2: Family-wise number of sighted bird species

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Future Directions:

The present bird account may be considered as the baseline information for further studies related to the avifaunal conservation, as such consolidated work on the avifauna of this rich area has not been done earlier. During our survey several instances viz., fishing activities, agricultural activities, human interference have been found. Many of these sites are abode to numerous migratory as well as rare birds discussed in the present report. Proper studies on population dynamics of water birds and the migration pattern migratory bird in these wetlands are highly recommended. All sorts of information which we experienced during the survey were time to time shared with the State forest department and also with NGOs working on wildlife conservations. Thus, some major steps taken have been jointly forest department and NGOs to conserve such hotspot areas.

Table 2:- Checklist of water birds In Mayurbhanj district:

Common Name	Scientific Name	Status
1. Podicipedidae		
1. Great Crested Grebe	<i>Podiceps cristatus</i>	M
2. Little Grebe	<i>Tachybaptus ruficollis</i>	R
2. Phalacrocoracidae		
3. Little Cormorant	<i>Phalacrocorax niger</i>	R
4. Great Cormorant	<i>Phalacrocorax carbo</i>	R
5. Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	R
3. Ardeidae		
6. Indian pond Heron	<i>Ardeola grayii</i>	R
7. Cattle Egret	<i>Bubulcus Ibis</i>	R
8. Great Egret	<i>Casmerodius albus</i>	R
9. Intermediate Egret	<i>Mesophoyx intermedia</i>	R
10. Purple Heron	<i>Ardea purpurea</i>	R
11. Grey heron	<i>Ardea cinerea</i>	R
12. Little heron	<i>Butorides striatus</i>	R
13. Yellow bittern	<i>Ixobrychus sinensis</i>	R
14. Goliath heron	<i>Ardea goliath</i>	M
4. Ciconiidae		
15. Asian Open bill Stork	<i>Anastomus oscitans</i>	R
16. Lesser adjutant	<i>Leptoptilos javanicus</i>	R
5. Threskiornitidae		
17. Black headed ibis	<i>Threskiornis melanocephalus</i>	R
6. Anatidae		
18. Cotton pygmy-goose	<i>Nettapus coromandelianus</i>	LM

19. Lesser whistling duck	<i>Dendrocygna javanica</i>	R
20. Common Pochard	<i>Aythya ferina</i>	M
21. Baers Pochard	<i>Aythya baeri</i>	M
22. Ruddy shelduck	<i>Tadorna ferruginea</i>	M
23. Common shelduck	<i>Tadorna tadorna</i>	M
24. Mallard	<i>Anas platyrhynchos</i>	M
25. Northern Pintail	<i>Anas acuta</i>	M
26. Northern shoveller	<i>Anas clypeata</i>	M
27. Ferruginous Pochard	<i>Aythya nyroca</i>	M
28. Tufted duck	<i>Aythya fuligula</i>	M
29. Eurasian Wigeon	<i>Anas Penelope</i>	M
30. Gadwall	<i>Anas strepera</i>	M
7. Rallidae		
31. Common Coot	<i>Fulica atra</i>	M
32. White breasted waterhen	<i>Amaurornis phoenicurus</i>	R
33. Ruddy breasted Crake	<i>Porzana fusca</i>	R
34. Common moorhen	<i>Gallinula chloropus</i>	R
35. Purple swamphen	<i>Porphyrio porphyrio</i>	R
8. Charadriidae		
36. Common Sandpiper	<i>Actitis hypoleucos</i>	M
37. Little ringed Plover	<i>Charadrius dubius</i>	M
38. Marsh Sandpiper	<i>Tringa Stagnatilis</i>	M
39. Green sandpiper	<i>Tringa ochropus</i>	M
40. Red wattled lapwing	<i>Vanellus indicus</i>	R
9. Jacanidae		
41. Bronze-winged jacana	<i>Metopidius indicus</i>	R
42. Pheasant-tailed jacana	<i>Hydrophasianus chirurgus</i>	R
43. Great thick knee	<i>Esacus recurvirostris</i>	R
10. Recurvirostridae		
44. Black winged stilt	<i>Himantopus himantopus</i>	R
11. Alcedinidae		
45. Common Kingfisher	<i>Alcedo atthis</i>	R
46. White-throated kingfisher	<i>Halcyon smyrensis</i>	R

Note: R-(Resident) LM- (local Migratory) M- (Migratory)

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