

Bird Diversity of Dhauladhar Nature Park - Gopalpur, District Kangra, Himachal Pradesh

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(Accepted 08 June, 2014)

ABSTRACT

A study regarding survey of birds was carried out at Dhauladhar Nature Park Gopalpur of District Kangra in the month of July 2011. During the present taxonomic and ecological study there was seen 89 species of birds belonging to 62 genera, 34 families and 11 orders. Out of a total 89 species 49 have been placed under Indian Wildlife Protection Act 1972 while rest were found to be least concern. Insectivores represents 38 species while 16 species of the birds were omnivores and 14 species of the birds were found frugivorous and 10 species belongs to granivores.

Key words: Bird diversity, Dhauladhar Nature Park, Northern Himalayas

INTRODUCTION

Himachal Pradesh state has different type of flora and fauna owing to different climatic and geographical conditions. The region is hilly; the soil is predominantly shallow and sandy, allowing many vegetal formations to grow, such as forest galleries, cerrado, veredas and altitude fields. Local climate is classified as subtropical, and shows well-marked cold (October to February) and rainy (July to September) and summer (March to June) seasons (Balokhra, 1999) throughout the year. The minimum temperature is 5^o degree in January (winter) and maximum 40^o in June (summer). The annual rainfall in this zone varies from 1500 mm to 1800 mm.

Dhauladhar Nature Park is situated at 31^o 42' North Latitude and 76^o 43' 48" East Longitude, and altitude varies from 1235 to 1300 m of msl in the mid-hill of the northwestern region of Himalayas. The records shows that in Himachal Pradesh although various studies has been done since the time of British period (Ali 1949 and Ali and Ripley 1983) but vast studies have been made by workers only after the periods of nineties. A limited data is available regarding the study of birds of Himachal Pradesh.

Avian fauna is an integral part of an ecosystem and play different vital roles in the ecosystem acting as predators, scavengers and pollinators (Dhadse *et al.*, 2009) and bio-indicators (Schwartz and Schwartz, 1951 ; Padoa-Schioppa *et al.*, 2006)

Birds recording data plays an important role in providing us the baseline data regarding the distribution of a particular species in a particular area and making comparison with the other areas of it's distribution (Colin, 2000). The population diversity of birds is decreasing because of various environmental and climatic disturbances Rapoport, 1993; Chen *et al.*, 2011 and Sekercioglu *et al.*, 2012). The bird's surveys are helpful in making plans for the conservation of the endangered species.

Study area: Study was carried out in the Dhauladhar Nature Park Gopalpur which is a Zoological Park and located in the midhills of the Shivalik hills of the Himalayas. This Zoological Park falls under wild life division of Hamirpur.

MATERIALS AND METHODS

In order to know the free ranging bird species in and surrounding the Dhauladhar Nature Park a bird race was organized. In this exercise, in addition to local staff of Dhauladhar Nature Park, Gopalpur, field staff of Hamirpur Wildlife Division and some bird lovers also participated. The whole area of Dhauladhar Nature Park was divided into 4 sections and a total of 20 participants, participated in this exercise. The birds were viewed with good quality of binocular and photographed with good quality of cameras (Grimmett *et al.*, 1998; Ali and Ripley, 1987) and were identified with relevant reference books.

RESULTS AND DISCUSSION

A total of 89 species of free living species of birds of different genera were found existing in and around the Nature Park. The present studies on bird species of Dhauladhar Nature Park Gopalpur district kangra, Himachal Pradesh revealed the presence of 89 species of birds belonging to 62 genera and belongs to 34 families and 11 orders. Family wise analysis showed that family Muscicapidae (20 species) dominated the avifauna, followed by Columbidae, Psittacidae, Capitonidae (4 each), Accipitridae, Phasianidae, Corvidae, Cuculidae, Hirundinidae, Passeridae, Sturnidae, Ardeidae, Dicuridae, Leiothrichidae, and Pycnonotidae (3 each), whereas, Picidae, Laniidae, Phylloscopidae, Picinae and Rhipiduridae (2 each), and Campephagidae, Sittidae, Zosteropidae, Fringilidae, Estrildidae, Acrocephalidae, Alcedinidae, Certhiidae, Charadriidae, Monarchidae, Nectariniidae, Oriolidae, Paridae and Rallidae (1 species each) were poorly represented in the area (Table 1). Our findings also strengthens the report of other researchers regarding the abundance of Muscicapidae family which was reported to be the largest family of birds in India (Manakadan and Pittie, 2001; Mahabal, 2000 ; Thakur, 2010) The present study also shows that passerine birds dominated the diversity with 58 species as compared to non-passerines (31species) (Table 1). Out of 89 species of the birds insectivores represents 38 species and 16 species of the birds were omnivores and 14 species of the birds were frugivorous and 10 species belongs to granivores.

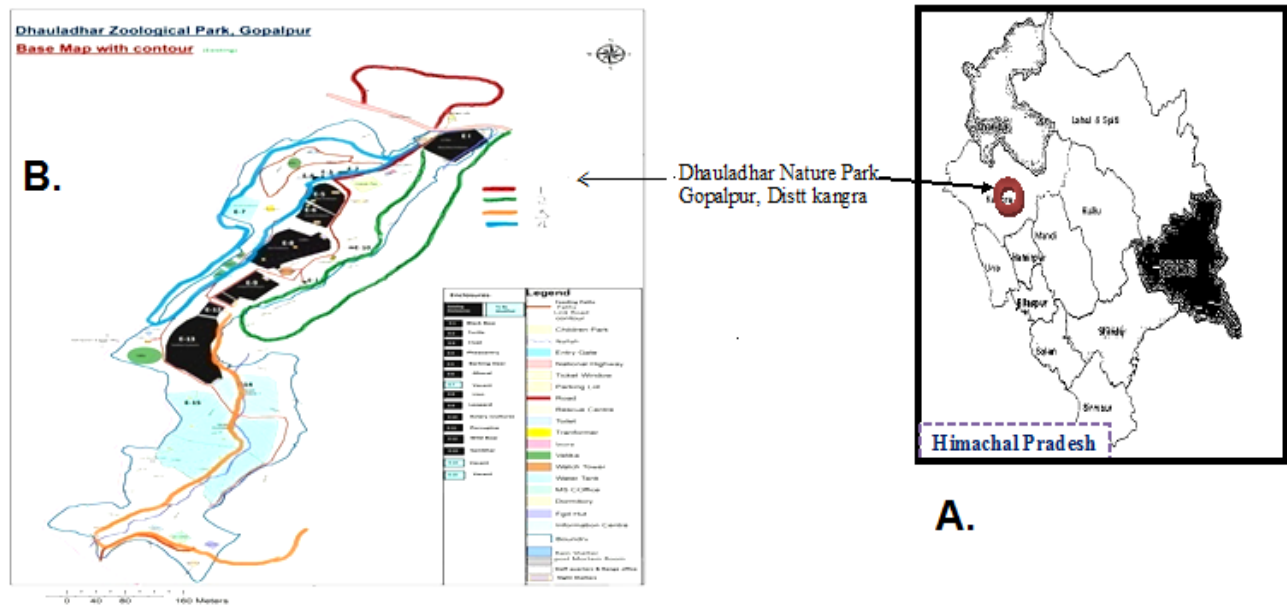


Figure 1. A. Map showing location of Dhauladhar Nature Park Goplapur;
B. Map showing Existing map of Dhauladhar Nature park, depicting the sections of Bird count.

Birds are the indicators of various environmental as well ecological disturbances in any area. Some birds are indicators of the pollution while some are indicators of seasonal and geographical variability. These types of studies are helpful in knowing the biodiversity of a particular area as well as the population and abundance of any species in that particular area.

Table-1: Detail of Birds with Scientific names, orders, family and status under Wild Life Protection Act (1972).

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Table 1. Detail of Birds with Scientific names, orders, family and status under Wildlife Protection Act (1972).

Sl No.	Name of birds	Scientific names	Order	Family	Wildlife Protection act(1972) yes/no	Food Habit
PARAKEETS						
1	Alexandrine Parakeet	<i>Psittacula eupatria</i>	Psittaciformes	Psittacidae	y	F
2	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	Psittaciformes	Psittacidae	y	F
3	Slaty-headed Parakeet	<i>Psittacula himalayana</i>	Psittaciformes	Psittacidae	y	F
4	Rose-ringed Parakeet	<i>Psittacula krameri</i>	Psittaciformes	Psittacidae	y	F
DRONGOS						
5	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Passeriformes	Dicruridae	y	I
6	Black Drongo	<i>Dicrurus macrocercus</i>	Passeriformes	Dicruridae	y	I
7	Spangled Drongo	<i>Dicrurus hottentottus</i>	Passeriformes	Dicruridae	y	I
PRINIAS						
8	Ashy Prinia	<i>Prinia socialis</i>	Passeriformes	Muscicapidae		I
9	Jungle Prinia	<i>Prinia sylvatika</i>	Passeriformes	Muscicapidae		I
10	Plain Prinia	<i>Prinia nornata</i>	Passeriformes	Muscicapidae		I
11	Striated Prinia	<i>Prinia criniger</i>	Passeriformes	Muscicapidae		I
FLYCATCHERS						
12	Asian Brown Flycatcher	<i>Muscicapa latirostris</i>	Passeriformes	Muscicapidae	y	I
13	Asian Paradise flycatcher	<i>Terpsiphone paradisi</i>	Passeriformes	Monarchidae	y	I
14	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	Passeriformes	Muscicapidae	y	I
15	Verditer Flycatcher	<i>Eumyias thalassina</i>	Passeriformes	Muscicapidae	y	I
16	Ultramarine Flycatcher	<i>Ficedula superciliaris</i>	Passeriformes	Muscicapidae	y	I
CUCKOOS						
17	Asian Koel	<i>Eudynamis scolopacea</i>	Cuculiformes	Cuculidae	y	F
18	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	Cuculiformes	Cuculidae	y	I
19	Lesser Cuckoo	<i>Cuculus bpoliocephalus</i>	Cuculiformes	Cuculidae	y	I
MYNAS						
20	Bank Myna	<i>Acridotheres ginginianus</i>	Passeriformes	Sturnidae	y	O
21	Common Myna	<i>Acridotheres tristis</i>	Passeriformes	Sturnidae	y	O
22	Jungle Myna	<i>Acridotheres fuscus</i>	Passeriformes	Sturnidae	y	O
SWALLOWS						
23	Barn Swallow	<i>Hirundo rustica</i>	Passeriformes	Hirundinidae		I
24	Red-rumped Swallow	<i>Hirundo daurica</i>	Passeriformes	Hirundinidae		I
25	Wire-tailed Swallow	<i>Hirundo smithii</i>	Passeriformes	Hirundinidae		I
NUTHATCHES AND TREECREEPERS						
26	Bar-tailed Tree creeper	<i>Certhia himalayana</i>	Passeriformes	Certhiidae		I
27	Chestnut-bellied nuthatch	<i>Sitta cinnamoventris</i>	Passeriformes	Sittidae		O
BULBULS						
28	Black Bulbul	<i>Hypsipetes leucocephalus</i>	Passeriformes	Pycnonotidae	y	F
29	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	Passeriformes	Pycnonotidae	y	F
30	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Passeriformes	Pycnonotidae	y	F

Table 1 Continued..

BABLERS						
31	Black-chinned Babbler	<i>Stachyris pyrrhops</i>	Passeriformes	Muscicapidae	y	I
32	Common Babbler	<i>Turdoides caudatus</i>	Passeriformes	Muscicapidae	y	I
33	Jungle Babbler	<i>Turdoides striatus</i>	Passeriformes	Muscicapidae	y	I
FRANCOLINS						
34	Black Francolin	<i>Francolinus francolinus</i>	Galliformes	Phasianidae		V,I
35	Grey Francolin	<i>Francolinus pondicerianus</i>	Galliformes	Phasianidae		G
KITES						
36	Black kite	<i>Milvus migrans</i>	Accipitriformes	Accipitridae		O
BARBETS						
37	Blue-throated Barbet	<i>Megalaima asiatica</i>	Piciformes	Capitonidae	y	F
38	Brown-headed Barbet	<i>Megalaima zeylanica</i>	Piciformes	Capitonidae	y	F
39	Coppersmith Barbet	<i>Megalaima haemacephala</i>	Piciformes	Capitonidae	y	F
40	Great barbet	<i>Megalaima virens</i>	Piciformes	Capitonidae	y	F
WARBLERS						
41	Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i>	Passeriformes	Acrocephalidae		I,F
42	Grey-hooded Warbler	<i>Phylloscopus xanthoschistos</i>	Passeriformes	Phylloscopidae		I
43	Hume's Warbler	<i>Phylloscopus humei</i>	Passeriformes	Phylloscopidae		F
WOODPECKERS						
44	Brown-fronted Woodpecker	<i>Dendrocopos auriceps</i>	Piciformes	Picidae	y	O
45	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	Piciformes	<u>Picidae</u>	y	O
46	Grey-headed Woodpecker	<i>Picus canus</i>	Piciformes	Picinae	y	O
47	Black-rumped Flameback	<i>Dinopium benghalense</i>	Piciformes	Picinae		O
EGRETS AND HERONS						
48	Cattle Egret	<i>Bubulcus ibis</i>	Ciconiiformes	Ardeidae	y	A
49	Little Egret	<i>Egretta garzetta</i>	Ciconiiformes	Ardeidae	y	A,I
50	Indian Pond Heron	<i>Ardeola grayii</i>	Ciconiiformes	Ardeidae		A,I
SPARROWS AND SNOWFINCHES						
51	Chestnut shouldered petronia	<i>Petronia xanthocollis</i>	Passeriformes	Passeridae		O
52	House Sparrow	<i>Passer domesticus</i>	Passeriformes	Passeridae		G
53	Russet Sparrow	<i>Passer rutilans</i>	Passeriformes	Passeridae		G
LAUGHINGTHRUSHES AND THRUSHES						
54	Chestnut-crowned Laughing thrush	<i>Garrulax erythrocephalus</i>	Passeriformes	Leiothrichidae	y	I
55	Variiegated Laughing thrush	<i>Garrulax variegates</i>	Passeriformes	Leiothrichidae	y	I
56	Orange-headed Thrush	<i>Zoothera citrina</i>	Passeriformes	Muscicapidae	y	O
57	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	Passeriformes	Muscicapidae	y	A,I
CROWS						
58	Large-billed Crow	<i>Corvus macrorhynchos</i>	Passeriformes	Corvidae		O
ROSEFINCHES						
59	Common Rose finch	<i>Carpodacus erythrinus</i>	Passeriformes	Fringillidae		G
VULTURES						
60	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitriformes	Accipitridae	y	S
ORIOLES						
61	Eurasian Golden Oriole	<i>Oriolus oriolus</i>	Passeriformes	Oriolidae	y	F,I

Table 1 Continued..

TITS						
62	Great Tit	<i>Parus major</i>	Passeriformes	Paridae	y	I
BUSHCHATS						
63	Grey Bushchat	<i>Saxicola ferrea</i>	Passeriformes	Muscicapidae		I
64	Pied Bushchat	<i>Saxicola caprata</i>	Passeriformes	Muscicapidae		I
CHATS						
65	Indan Robin	<i>Saxicoloides fulicata</i>	Passeriformes	Muscicapidae		I
66	Oriental Magpie Robin	<i>Copsychus saularis</i>	Passeriformes	Muscicapidae		I
DOVES						
67	Laughing Dove	<i>Streptopelia senegalensis</i>	Columbiformes	Columbidae	y	G
68	Red Collared Dove	<i>Streptopelia tranquebarica</i>	Columbiformes	Columbidae	y	G
69	Spotted Dove	<i>Streptopelia chinensis</i>	Columbiformes	Columbidae	y	G
MINIVETS AND FANTAILS						
70	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Passeriformes	Campephagidae		I
71	White-throated Fantail	<i>Rhipidura albicollis</i>	Passeriformes	Rhipiduridae		I
72	White-browed Fantail	<i>Rhipidura aureola</i>	Passeriformes	Rhipiduridae		I
WHITE-EYES						
73	Oriental White-eye	<i>Zosterops palpebrosus</i>	Passeriformes	Zosteropidae	y	O
KINGFISHERS						
74	Pied Kingfisher	<i>Cerylerudis</i>	Coraciiformes	Alcedinidae	y	A
SUNBIRDS						
75	Purple Sunbird	<i>Nectarinia asiatica</i>	Passeriformes	Nectariniidae	y	N
SHRIKES						
76	Red-backed Shrike	<i>Lanius collurio</i>	Passeriformes	Laniidae		C
77	Long-tailed Shrike	<i>Lanius schach</i>	Passeriformes	Laniidae		C
MAGPIES						
78	Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	Passeriformes	Corvidae	y	O
79	Yellow-billed Blue Magpie	<i>Urocissa flavirostris</i>	Passeriformes	Corvidae	y	O
PHEASANTS						
80	Red junglefowl	<i>Gallus gallus</i>	Galliformes	Phasianidae		G
LAPWINGS						
81	Red-wattled Lapwing	<i>Vanellus indicus</i>	Charadriiformes	Charadriidae		I,V
PIGEONS						
82	Rock Pigeon	<i>Columba livia</i>	Columbiformes	Columbidae		G
MUNIAS						
83	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Passeriformes	Estrildidae	y	G,F
FORKTAILS AND REDSTARTS						
84	Spotted Forktail	<i>Enicurus maculates</i>	Passeriformes	<u>Muscicapidae</u>		I
85	White-capped Water Redstart	<i>Chaimarromis leucocephalus</i>	Passeriformes	<u>Muscicapidae</u>		I
TAILORBIRDS						
86	Common Tailorbird	<i>Orthotomus sutorius</i>	Passeriformes	<u>Muscicapidae</u>		I
CRAKES						
87	White-breasted Waterhen	<i>Amauromis phoenicurus</i>	Gruiformes	<u>Rallidae</u>		O
SIBIAS						
88	Rufous sibia	<i>Heterophasia capistrata</i>	Passeriformes	<u>Leiothrichidae</u>		I,F
ACCIPITERS						
89	Shikra	<i>Accipiter badius</i>	Accipitriiformes	<u>Accipitridae</u>		C

*Feeding Habit: C-Carnivorous; F-Frugivorous; I-Insectivorous; G-Graminivorous; O-Omnivorous; S-Scavenger; V-Vegetable matter; N-Nectar eater; A-Aquatic animal eater.

Plate 1: Images of Birds found in Dhauladhar Nature Park



Grey-hooded Warbler



House Sparrow



Jungle Myna



Indian Robin



Indian Pond Heron



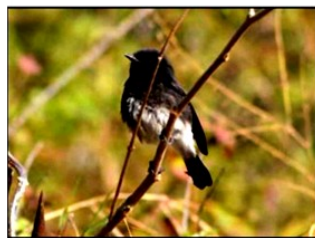
Little Egret



Oriental Magpie Robin



Oriental White-eye



Pied Bushchat



Pied Kingfisher



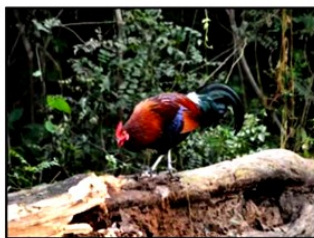
Plum-headed Parakeet



Red-billed Blue Magpie



Red Collared Dove



Red Junglefowl



Red-wattled Lapwing



Red-vented Bulbul



Red-rumped Swallow



Rock Pigeon



Rose-ringed Parakeet



Scaly-breasted Munia

Plate 2: Images of Birds found in Dhauladhar Nature Park

