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Birds' population in district Haripur, Khyber Pakhtunkhwa, Pakistan

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ABSTRACT

Haripur in situated KPK, Pakistan by having the plain and hilly areas contain the diversity of wildlife fauna. Due to presence of uniqueness in habitat having the thick forests and abundant vegetation as we all know that of an area birds are important poles of the environment. Of the universe they play a vigorous role in the biological system. Having a great variety of insects most birds are voracious feeders and thus, upon insect numbers one of the most effective natural checks. Known to man since ages Birds are useful for mankind and provide abundant food. The present study was planned which was aimed at following population of birds of district Haripur, KPK, Pakistan. In order to conduct the study on the population status, importance of hilly areas diversity, local threats to avian fauna, through direct alongwith indirect methods the data was collected. Binocular (12X 50X) mostly used in wildlife survey were used in the present survey from large distance to see birds easily identified by using identification key. The survey was conducted from Jan 2018 to Dec 2018. Total 37 species having 10 orders and 21 families were found during the study. Most of these birds are common in distribution status as like crows, house sparrows, tree pie, chiffchaff, common myna, koel, are abundance in nature and having the large population in the hilly areas some are resident and some are winter and summer visitors also studied the distribution status of these species no comprehensive work is done before on the avian fauna of district Haripur need to conserve the astonishing beauty of birds.

Key words: Birds, Distribution, Haripur, Habitat, House sparrow, Myna

INTRODUCTION

Haripur in situated KPK, Pakistan by having the plain and hilly areas contain the diversity of wildlife fauna. Due to presence of uniqueness in habitat having the thick forests and abundant vegetation as we all know that of an area birds are important poles of the environment. Of the universe they play a vigorous role in the biological system. Having a great variety of insects most birds are voracious feeders and thus, upon insect numbers one of the most effective natural checks. Known to man since ages Birds are useful for mankind and provide abundant food (Villaseñor *et al.*, 2014).

On the planet birds are debatably, conspicuous, pervasive and the best studied group of vertebrates (Inger *et al.*, 2016). Birds by responding rapidly to environmental change are highly mobile, occur globally in nearly all habitats, fill many ecological roll (Wenny *et al.*, 2011). Than other class of vertebrates the class Aves contains more species distributed over nearly the entire earth. In Worldwide about 9930 species of birds exist, belonging to 204 families with a tremendous diversity of life style. Avian species belong to the order Passeriformes are More than 50 percent of the extant (Aerts *et al.*, 2016). Depending on the taxonomic viewpoint (Salahudeen *et al.*, 2013). Approximately 1300 species of birds are found in India, establishing 13% of the bird assembly of world and thus is an area of high avian diversity (Bhatt and Joshi, 2011). Pakistan has 668 bird species including (International, 2013).

As birds richness of life and beauty lead by diversity the most prevalent life forms on the planet. Apart from this, with artistic behavior bird's their essentially beautiful plumage, melodious songs, always fascinated mankind. Besides this, for many aspects birds are valuable that is, they are a of pollution sensitive indicator. Bird devours large number of harmful insects, as well as their larvae and eggs, in Pakistan, which serves as a biological control agent of insect pests so the bird species are good friends of farmers (Moss, 2013).

The diversity of all living organisms depends on temperature, soil, precipitation, altitude, geography and the presence of other species. Due to environmental changes that caused mass extinctions about 1% of the existent species of the Earth are extant (Groombridge *et al.*, 2002). Both biological and structural features Bird species diversity and richness are directly correlated with habitat diversity (Soka *et al.*, 2013). Due to its expansion, explosion of forests population, and over exploitation of natural resources occurs, Pakistan is under marvelous ecological stress (Tali *et al.*, 2013). In Pakistan the bird is normally in open nurtured melded with scrub forests tracks and grasslands found foraging and is seldom observed above an elevation of 1200 m (Pathan *et al.*, 2014). Mynas, hoopoes, flycatchers, bulbuls, crows, babblers, sparrows and wagtails are well known insect predators. Sharp respond to environmental changes they are "ecological litmus" (Gole, 1998). Having a particular role in an ecosystem species are distinct units of diversity. Therefore, checking erosion of the gene pool and the loss of species is a big threat to the community (Vellend and Geber, 2005). Wild fauna is rich In Khyber Pakhtunkhwa and its wildlife thriving in forests is a precious legacy of the country wildlife species were run by a point of elimination due to ground hunting. For this purpose to wildlife in Khyber Pakhtunkhwa it is

necessary to provide best protection, therefore as protected areas several areas were declared (Maas *et al.*, 2013). According to IUCN many bird species have a high threat to extinction In Pakistan they are a thigh threats (Noureen *et al.*, 2018). Among different animal species the habitat selection by a species is a classified process and it varies, due to which habitat analysis becomes difficult (Khalil *et al.*, 2016). Local people in natural environment do not know about the significance of wildlife and shoot them, with air sling shot including some uncommon fowl species, (locally named galail) or guns. So far on avian fauna no work has been done previously in district Haripur. Therefore present study was planned which was know the population of birds of district Haripur, KPK, Pakistan.

MATERIALS AND METHODS

Study area: Study was carried out in the District Haripur. Haripuris the famous District, in Khyber Pakhtunkhwa Pakistan, in the west of Swabi and Buner, 35 km away from Abbottabad and 65 km from Islamabad with altitude 520m. Having the 33.9946° N, 72.9106°E. This hilly area having attractive weather and greeneries (Figure 1).

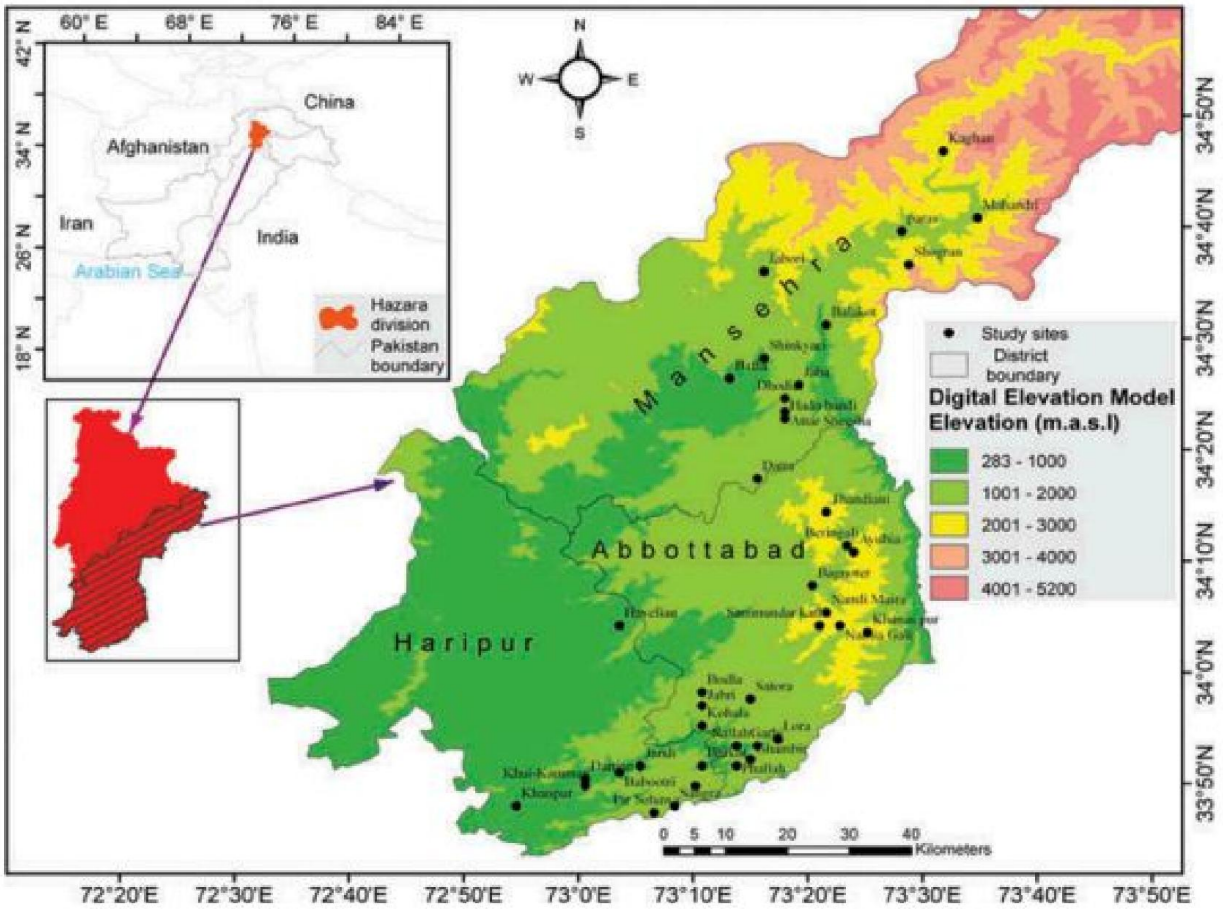

Figure 1: Map of district Haripur.

Methods of bird counting used to record and estimated bird population: The survey was conducted from January 2018 to December 2018. In order to conduct the study on the population status, importance of hilly areas diversity, local threats to avian fauna, through direct alongwith indirect methods the data was collected.

To gather information about exploring the avian fauna. For indirect data collection information from local peoples, local residents, shepherds, hunters, forest officers of the hilly areas and other knowledgeable persons of the study area were interviewed about the present alongwith past status of the birds. For direct observation the areas were systematically surveyed, by visiting the study area from dawn to dusk once or twice a week. Binocular (12X 50X) mostly used in wildlife survey were used in the present survey from large distance to see birds easily identified by using identification key given by (Mirza and Wasiq, 2007). As researchers belong to a hilly area of Haripur there are hills covered with thick forest and that habitat is undisturbed few houses are present there but they showed no harm to that fauna my own house is open and the various types of birds come to feed the grains that was spread for the chickens kept in our house their dutiful sound make me amused so that was easy for me to visit the forest and observe the birds to write the observed data I used a note book. To capture the image of birds we used camera. In indirect method best evidences for determining its status were provided about the callings, feathers, fecal droppings and information collected from shepherds, local residents, game watchers and hunters and of the area. After their observation data was interpreted and also there conservation status was mentioned. Information were tabulated to get maximum consistent results and compared.

RESULTS AND DISCUSSION

During the present study the following birds were observed, the common birds are there were tree pie, chiffchaff, sparrows, crows, house sparrows, mynas, crows and tree pie are prey upon the pigeons that were kept in houses, and they stole their new born babies and also their eggs sometimes crow take away the new babies of domestic chickens. Total 37 species having 10 orders and 21 families were recorded during the study (Table 1). Most of these birds are common in distribution status as like crows, house sparrows, treepie, chiffchaff, common myna, koel, are abundance in nature and having the large population in the hilly areas some are resident and some are winter and summer Visitors some species not recognized like on the locate trees green color parrot like birds were found during the study. In the month of July 2011 study concerning bird's survey was carried out at Dhauladhar district, Kangra Nature Park Gopalpur (India). During the present ecological and taxonomic study were conducted there was seen 89 species of birds associated to 34 families, 62 genera and 11 orders. 49 species out of a total 89 have been placed under Wildlife Protection Act 1972 of India while rests were found to be least concern (Zhou *et al.*, 2014). The checklist of fowl species recorded from the urban zone of Gujranwala has been prepared. The information were gathered from towns, parks, gardens grounds, tracks of railway and trench going through the city and open regions and reported the birds along river Chenab (Altaf *et al.*, 2012; Altaf, 2016; Altaf *et al.*, 2018; Ashraf *et al.*, 2018). Common and bank myna, house crow, house sparrow and bulbul were recorded and residential previously reported (Altaf *et al.*, 2012; Bibi *et al.*, 2019). Cultivated areas are important source food during my research study the bird's species were recorded from the, rural, chir pine forests, temperate coniferous forests, hilly, open areas, high and lower altitude areas of district during the study

Passeriformes order were highest recorded order of birds from there (Lim *et al.*, 2011). In past, the areas like main city of Haripur, Kangrdha colony and the areas having the population more they are less in birds diversity, while Khanpur, village Chhajjianhally, Jabriisaral are less populated so the avian fauna is divers. In villages the avian fauna is not much disturbed and found abundance but for the basic necessities of life habitat degradation is fluently carried out. If this situation proceeds than this diversity will be affected badly so there is need to conserve the habitat as well as the species that are rare in status need to be conserving so this document will help in the astonishing beauty of birds.

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Table 1: The birds of Haripur district.

Sr.	Order	Family	Scientific name	English name	Local name	Status
1	Passeriformes	Sturnidae	*Acridotheres tristis*	Common myna	Sharak	Common
2	Passeriformes	Sturnidae	*Sturnus pagodarum*	Brahminy myna	Turk sharak	Rare
3	Passeriformes	Passeridae	*Passer domesticus*	Hhouse sparrow	Chidrea	Common
4	Passeriformes	Corvidae	*Corvus splendens*	House crow	Kann	Common
5	Passeriformes	Corvidae	*Corvus macrorhyncus*	Jungle crow	Jungli kann	Common
6	Passeriformes	Corvidae	*Dendrocitta vagabunda*	Indian treepie	Peela khapra	Common
7	Passeriformes	Corvidae	*Urocissa flavirostris*	Yellow billed blue magpie	Safed khapra	Common
8	Passeriformes	Pycnonotidae	*Pycnonotus cafer*	Red vented bulbul	Burdhbul	Common
9	Passeriformes	Pycnonotidae	*Pycnonotus leucogenys*	White checked bulbul	Kali burdhbul	Common
10	Passeriformes	Muscicapidae	*Rhyacornis fuliginosus*	Plumbbeous redstart	_	Common
11	Passeriformes	Phylloscopidae	*Phylloscopus collybita*	Brown chiffchaff	Patolla	Common
12	Passeriformes	Cisticolidae	*Cisticola juncidis*	Faintail warbler	_	Common
13	Passeriformes	Cisticolidae	*Orthotomus sutorius*	Tailer bird		Common
14	Passeriformes	Cisticolidae	*Cisticola juncidis*	Brown hill warbler	Chichola	Common
15	Passeriformes	Muscicapidae	*Terpsiphone paradisi*	Paradise flycatcher	_	Rare
16	Passeriformes	Leiothrichidae	*Trochalopteron lineatum*	Streaked laughing thrush	Shoar	Common
17	Passeriformes	Motacilidae	*Motacilla alba*	White wagtail	Kali papeeri	Common
18	Passeriformes	Motacilidae	*Motacilla flava*	Yellow wagtail	Peeli papeeri	Common
19	Passeriformes	Muscicapidae	*Myophonus caeruleus*	Whistling thrush	_	Rare
20	Passeriformes	Muscicapidae	*Copsychus saularis*	Magpie robin	_	Common
21	Passeriformes	Muscicapidae	*Saxicola torquata*	Pied bush chat	_	Common
22	Passeriformes	Muscicapidae	*Enicurus scouleri*	Little forktail	_	Common
23	Passeriformes	Paridae	*Parus major*	Grey tit		Common
24	Passeriformes	Dicruridae	*Dicrurus macrocercus*	Black drango	Kala cheet	Rare
25	Passeriformes	Hirundinidae	*Hirundo rustica*	Common swallow	Ababee	Common
26	Strigiformes	Strigidae	*Strixleptogramica*	Himalyan brown owl	uloo	Rare
27	Cuculiformes	Cuculidae	*Eudynamys scolopacea*	Koel	Kali koell	Common
28	Bucerotiformes	Upupidae	*Upupa epops*	Hoopoe	Hudhud	Rare

29	Coraciiformes	Alcedinidae	*Alcedoathis*	Common kingfisher	Neela dado	Rare
30	Coraciiformes	Alcedinidae	*Halcyon smyrnensis*	White breasted kingfisher	mitiranga dado	Rare
31	Columbiformes	Columbidae	*Columbia livia*	Blue rock pigeon	Jungli kabooter	Common
32	Columbiformes	Columbidae	*Streptopelia chinensis*	Spotted dove	Koghi	Common
33	Columbiformes	Columbidae	*Streptopelia decocto*	Collared dove	Koghi	Rare
34	Charadriformes	Scolopaciidae	*Actitis hypoleucos*	Common sand piper	_	rare
35	Psittaciformes	Psittacidae	*Psittacula krameri*	Rose ringed parakeet	Totta	rare
36	Accipitriformes	Acciptridae	*Circus macrourus*	Pallied harrier	Basha	Common
37	Galliformes	Phasianidae	*Francolin pondicerianus*	Grey francolin	teeter	Common