

Diversity of avian fauna in Azmatabad, Thanna Mandi, Rajouri (J&K) India

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ABSTRACT

Present research was carried out to document the avifauna recorded for the first time in Azmatabad Village, Thanna Mandi District Rajouri Jammu and Kashmir. With an altitude range, the number of species present in lower altitude decreases as one increases in altitude. The current study added valuable information on avifauna diversity and will develop effective conservation in Jammu and Kashmir's Azmatabad village. During this survey, the bird diversity was recorded for the first time as a preliminary listing purpose. The field survey was conducted from March to December 2021. A total of 50 species of avifauna have been identified. The preliminary listing is provided for the enterprise of future analysis and conservation, more over as management on the bird's diversity.

Figure : 00

References : 17

Table : 01

KEY WORDS : Azmatabad, Birds, Checklist, Diversity, First record, Status

Introduction

Avifauna is one of the most important ecological indicators for assessing habitat quality. The majority of the birds are useful for grouping. Birds play an important role in crop pest management as rodent predators, scavengers, seed dispensers and pollinating agents. As a result, birds are raised not only to preserve ecological balance, but additionally to produce economically valuable products like down feathers. The Indian landmass' bird habitats are frequently classified as forest, scrub, wetlands, marine, grassland, desert, and agricultural land. Several bird species require a diverse range of home grounds⁹. For conservation measures to be implemented, it is necessary to understand the species diversity and the type of the species.

Birds are an important component of any natural ecosystem; they help control insect pests of agricultural crops. This paper compiles a comprehensive list of the birds found within the geographical boundaries of Azmat

abad village, Thanna Mandi, Rajouri (J&K). Geographically, the area is characterised by a heterogeneous landscape with a diverse altitudinal range, as well as enormous diversity in habitats and climatic regimes. The area has been reported to have 08 orders of avian taxa represented by 15 families, with 50 species classified (Table-1).

As far as of avian diversity of India is concerned, many workers have made useful contributions in this regard¹⁻¹⁷. The area under present investigation remained virgin as for as diversity of avifauna is concerned.

This paper presents the distribution (presence or absence) of all bird species in the region.

Material and Methods

Study area

Azmat abad village in the district of Rajouri, Jammu and Kashmir, India is located 26 kilometres from the district headquarters and is between 33°56,501 latitude

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TABLE -1: Checklist of Birds Azmatatabad Village, Thanna Mandi, Rajouri (J&K) India

Scientific name	Common Name	*Status	IUNC status
ORDER: ACCIPITRIFORMES			
Family: Accipitridae			
<i>Accipiter badius dussumieri</i>	Shikra	C	LC
<i>Aquila nipalensis</i>	Steppe Eagle	R	LC
<i>Butastur teesa</i>	White-eyed Buzzard	R	NT
<i>Buteo rufinus rufinus</i>	Long-legged Buzzard	R	LC
<i>Circus aeruginosus</i>	Western Marsh Harrier	R	LC
<i>Circus cyaneus</i>	Hen Harrier	C	LC
<i>Clanga hastata</i>	Indian Spotted Eagle	R	LC
<i>Elanus caeruleus vociferus</i>	Black-winged Kite	C	NT
<i>Gyps himalayensis</i>	Himalayan Vulture	R	LS
<i>Milvus migrans lineatus</i>	Black-eared Kite	C	LS
ORDER: COLUMBIFORMES			
Family: Columbidae			
<i>Columba livia intermedia</i>	Rock Pigeon	cC	LS
<i>Streptopelia chinensis chinensis</i>	Spotted Dove	C	LS
<i>Streptopelia decaocto decaocto</i>	Eurasian Collared Dove	UC	LS
<i>Streptopelia tranquebarica</i>	Red Collared Dove	VA	LS
ORDER: CUCULIFORMES			
Family: Cuculidae			
<i>Eudynamis scolopaceus</i>	Asian Koel	Common	LS
<i>Clamator jacobinus pica</i>	Pied Cuckoo	Common	LS
<i>Cuculus canorus bakeri</i>	Common Cuckoo	UN	LS

ORDER: CORACIIFORMES			
Family: Alcedinidae			
<i>Alcedo atthis</i>	Common Kingfisher	C	LS
<i>Ceryle rudis</i>	Pied Kingfisher	UN	LS
<i>Halcyon smyrnensis</i>	White-throated Kingfisher	UN	NT
Family: Meropidae			
<i>Merops orientalis</i>	Green Bee-eater	R	NT
<i>Merops philippinus</i>	Blue-tailed Bee-eater	R	NT
Order: CHARADRIIFORMES			
Family: Scolopacidae			
<i>Tringa glareola</i>	Wood Sandpiper	C	LC
<i>Tringa tetanus eurhina</i>	Common Redshank	UN	NT
<i>Actitis hypoleucos</i>	Common Sandpiper	R	EN
<i>Tringa erythropus</i>	Spotted Redshank	C	LC
ORDER: PASSERIFORMES			
Family: Emberizidae			
<i>Emberiza lathami</i>	Crested Bunting	C	VU
<i>Emberiza stewarti</i>	White-capped Bunting	R	EN
<i>Emberiza cia</i>	Rock Bunting	VA	NT
<i>Emberiza cioides</i>	Medow Bunting	R	VU
Family :Passeridae			
<i>Gymnoris xanthocollis</i>	Yellow-throated Sparrow	VC	LC
<i>Passer domesticus parkini</i>	House Sparrow	VC	LC
<i>Passer cinnamomeus</i>	Russet Sparrow	R	LC

Family: Sturnidae			
<i>Acridotheres tristis</i>	Common Myna	C	LS
<i>Acridotheres ginginianus</i>	Bank Myna	VC	NT
<i>Gracupica contra</i>	Asian Pied Starling	R	VU
<i>Sturnia malabarica</i>	Chestnut-tailed Starling	R	LS
<i>Sturnia pagodarum</i>	Brahminy Starling	C	LS
<i>Sturnus vulgaris</i>	Common Starling	UN	LS
Family: Cisticolidae			
<i>Prinia socialis</i>	Plain Perinea	UN	LS
<i>Prinia inornata</i>	Ashy Perinea	UN	VU
<i>Prinia hodgsonii rueful</i>	Grey-breasted Perinea	R	VU
<i>Prinia cringer</i>	Striated Perinea	R	LS
<i>Prinia buchannan</i>	Rufous-fronted Perinea	UN	LS
<i>Cisticola juncidis</i>	Zitting Cisticola	R	LS
Family :Corvidae			
<i>Urocissa flavirostris</i>	Yellow -billed blue Magpie	C	LS
ORDER:- Piciformes			
Family : Picides			
<i>Piccus canus</i>	Grey- headed Woodpecker	R	LS
Family : Megalaimidae			
<i>Megalaima virens</i>	Great Barbet	R	VU
ORDER:GALLIFORMES			
Family: Phasianidae			
<i>Lophura leucomelanos</i>	Kalij pheasant	R	LC

ORDER:FALCONIFORMES			
Family: Falconidae			
<i>Falco tinnunculus</i>	Common kestrel	R	LS
ORDER:PICIFORMES			
Family:Picidae			
<i>Dendrocoptes</i>	Middle-spotted woodpecker	R	LS

* C - Common, LS - Least concern, R- Rare, UC- Uncommon, VU-Vulnerable, VC- Very common, NT- Near threatened, EN- Endangered

and 74°56'12" longitude. The study area has an altitude range of 1968 m. The village of Azmatabad is also linked to the Mughal road. The upper reaches of the study area experience heavy snowfall from December to April, and winter is harsh there, whereas the lower reaches have a pleasant season all year. The study area's basic floristic composition ranges from subtropical to subtemperate forest, with four distinct seasons per year: spring (March-May), summer (June-August), autumn (September-November), and winter (December-February). The study area is dominated by broad-leaved coniferous forests. Some higher reaches, such as D.KG, rattan peer, sukhsar, and others, have mixed forest and alpine pastures.

The subtropical forest is home to exceptional tree species such as *Olea cuspidate* (Khor), *Punica granatum* (Dhurni) and *Pinus roxburghii* chir (pine), while the temperate forest is home to *Quercus* and *Eleagnus* species. Summer temperatures range from 30 to 35 degrees Celsius, while winter temperatures range from 2 degrees Celsius to -4.8°C. In wintry weather, its mountain top experienced periodic snowfall, which the low mendacity vicinity may or may not have experienced (for one or two days). The most effective water assets in this area are springs, which can also feed the Azmatabad move for at least 10 months before drying up for one or two months before monsoon. Wheat, maize, and other crops are grown in this region, paddy in the summer. This area has a very poor horticultural impact, with only a few apple, walnut, akhrot, and plum trees.

Periodic surveys were conducted in the study area to record avian diversity using systematic field procedures and survey techniques. The nomenclature used in this work is consistent with that found⁵. Colorful plates^{8,9} were used for bird identification and field diagnosis. At close range or through binoculars, colours are usually the best

indicators of a species' identity. Classification of birds was in accordance with for inventorization and density determination of Aves⁸. Line Transect Method and Point Transect Method were used¹⁶. The points transect method was more helpful in thick forest area. Surveys were conducted from 6:30 am to 9:30 am in morning and 4:30 pm to 6:30 pm in evening during summers and 7:30 am to 10:30 am in morning and 3:30 pm to 5:30 pm in evening during winters. In addition to these fixed timings of surveys, some irregular visits were planned and made during other hours of the day. Local Abundance status of the recorded bird was established upon the following criteria¹⁵: Common-recorded 9-10 times out of 10 visits, uncommon -recorded 6 -8 times out of 10 visits, occasional- recorded 3 -5 times out of 10 visits, rare-recorded 0 -2 times out of 10 visits. Observations were carried out with the help of Binoculars (12x50 Super Zenith) whenever found necessary. Photographs were taken with Canon (EOS) fitted with 300mm zoom lens and Sony DV Camera with 40X Zoom and Calls of the birds were recorded by tape recorders and mobile.

Results and Discussion

A total of 50 species of birds were recorded first time in Azmatabad. The field observation and data collected in Azmatabad village in first phase area show that the area is supporting good bird diversity. The distribution of birds in a particular area depends on various factors, which include quantity and quality of food available, perching, roosting and nesting sites. Our observations during the current surveys clearly suggest that factors such as elevation, topography, climate and habitat heterogeneity have a marked influence on the distribution pattern of avian fauna in the study area. A large number of species have been recorded during the summer and much less in winters. Those at higher elevations

move below the snow line during winters while a few passage migrants stopover for few days en route to their destinations. This has led to the dynamic nature of the avian community in the region. Similar Periodic surveys were conducted in the study area to record avian diversity using systematic field procedures and survey techniques. The nomenclature used in this work is consistent with that done earlier⁵. The more popular English names in use in India are also listed. Colorful plates^{4,5,8,9} were used for bird identification and field diagnosis. At close range

or through binoculars, colours are usually the best indicators of a species' identity. Observations were made. In the western Himalaya, mid and high elevation habitats experience high species turnover between winter and summer. A few species of long distance latitudinal migrants take advantage of food rich mild summers at high elevations for breeding and spend winters at warmer latitudes. Seasonal fluctuations of birds occur due to changes in weather conditions or fluctuations in food productivity and habitat quality as also observed during the current surveys.

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