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Survey of birds in selected habitat of Tala

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Abstract

Birds are the most attractive and fascinating groups of animals on the earth. Birds play an important and dynamic role in the balanced ecological parameters uniting of food chain in ecological unit of nature. The study was performed in selected habitats of Tala region during August 2025 to Oct 2025. The main objective of this study was to explore the avian diversity of this zone. Data were collected for three consecutive months by using the point count method. The observations have recorded 42 species of birds that includes 10 orders and 28 families. The order Passeriformes has 21 species of birds. The family Sturnidae and Phasianidae (3 species) was the most diverse among all the 29 families. Notably, Jungle babbler, house crow and common myna were the most common species in this region. Further, six groups were formed according to their feeding habits: approximately 47% were omnivorous, 17% insectivorous, 14% herbivorous, 8% carnivorous, 6% frugivorous and 8% others.

Keywords: Birds; Passeriformes; Sturnidae; Omnivorous and Insectivorous; Jungle babbler

Introduction:

Birds are among the most diverse and ecologically significant groups of wildlife, occupying a wide range of habitats and serving as important indicators of environmental health. Their presence, abundance, and behaviour can reflect changes in habitat quality, climate, and ecological balance. Conducting a survey of birds within a selected habitat therefore provides valuable insights into the biodiversity, species composition, and ecological dynamics of the area. Regular interval monitoring of bird species, on the other hand, is useful for understanding changes in the ecosystem and habitat restoration plans.

Birds indicate the environmental health of any ecosystem (Collar and Andrew, 1988). Approximately 10,000 bird species have been recorded worldwide and about 13 % of the world's species are found in the Indian subcontinent (Grimmett et al., 2016). As the Study area comes under the region of the Himalayan foothills, the Himalayan region supports the rich avifaunal diversity due to rich floral diversity at different altitudes. (Mohan & Sondhi 2017). The Himalayan region is well known as a biodiversity hotspot, from the avian diversity point of view. (Satterfield et al. 1998). Many previous studies showed that 80 % of birds of the Indian Sub-continent found in the Himalayan region including some endemic species (Price et al., 2003). The last decade has been devoted to avian variety and conservation. (Naithani and Bhatt, 2010, Bhatt and Joshi, 2011, Joshi and Bhatt, 2015, Saini et al., 2017, Arya et al., 2019) where studies have been conducted on avifaunal diversity in forest habitat, wetlands, mangroves, and agriculture habitat in India (Singh, 2002). The Himalayan foothills are globally identified as a good biological diversity, supported by the complex and consequent climatic and edaphic conditions. The avifauna of the Western Himalaya, an Endemic Bird Area (Islam and Rahmani 2004) Birds are good indicators because they are ecologically versatile and thrive in all kinds of habitat carnivores, and omnivores. Their presence is an indication of a healthy ecosystem or habitat (Jarvinen and Vaisanen 1979; Jarvinen 1983).

This study focuses on documenting the bird species found in the selected habitat, assessing their relative abundance, and identifying factors that may influence their distribution. By systematically observing and recording bird populations, the survey aims to contribute to a better understanding of local biodiversity and support future conservation planning. The findings can also serve as a baseline for long-term monitoring, helping to track ecological changes and guide habitat management efforts.

Material & Methods:

Study Area

The survey was conducted in selected habitats located in Tala. This habitat was chosen for its known biodiversity and varied microhabitats, providing an opportunity to observe different bird species across different environmental conditions.

		Rock Pigeon	<i>Columba livia</i>
Charadriiformes	Charadriidae	Red-wattled Lapwing	<i>Vanellus indicus</i>
	Scolopacidae	Black-tailed Godwit	<i>Limosa limosa</i>
	Psittaculidae	Rose-ringed Parakeet	<i>Psittacula krameri</i>
Coraciiformes	Alcedinidae	Common Kingfisher	<i>Alcedo atthis</i>
		Pied Kingfisher	<i>Ceryle rudis insignis</i>
		White-throated Kingfisher	<i>Halcyon smyrnensis</i>
	Megalaimidae	Coppersmith Barbet	<i>Psilopogon haemacephalus indicus</i>
Accipitriformes	Accipitridae	Black-winged Kite	<i>Elanus caeruleus</i>
Anseriformes	Anseriformes	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>
		Northern Pintail	<i>Anas acuta</i>
Suliformes	Phalacrocoracidae	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>

Result:

In present study 44 species of birds that includes 11 orders and 29 families. The order Passeriformes has 21 species of birds. The family Sturnidae and Phasianidae (3 species) was the most diverse among all the 29 families. Notably, Jungle babbler, house crow and common myna were the most common species in this region. Further, six groups were formed according to their feeding habits: approximately 47% were omnivorous, 17% insectivorous, 14% herbivorous, 8% carnivorous, 6% frugivorous and 8% others.

Continuous check on birds diversity and data presented from here can be taken as a baseline data for environmental and biodiversity studies. It is known that birds are important in balancing ecosystem their presence in an around urban area marks very importance. Birds are playing precious role in ecosystem as pollinator, scavengers and predation of insect's pest. With such good numbers of birds, diversity here has not being affected by urbanization but in future it might affects due to increase in anthropogenic activity, such bird survey will help to create awareness among citizen which ultimately help in conserving them and maintaining the integrity of biodiversity. It is very necessary to save avian fauna not only in forest but also in urban areas.

Therefore it is the need of an hour to monitor the areas scientifically in this rapidly changing environment. The study shall be focused on status, distribution and conservation of the species of avifauna of the region. This can be achieved through meaningful participation of local population in protection and conservation of bird species. There is a need to spread a word of awareness about the conservation of species to maintain the ecological balance. We propose to take this study forward to understand the level of participation of the local people for the cause and assess the probable impact of above-mentioned developmental activities on the habitat.

Conclusion

Bird diversity is a crucial aspect of overall biodiversity and ecosystem health. The study of bird diversity helps illuminate the complexity of ecosystems and the interdependence of species within those systems. Protecting bird species and habitats requires concerted global efforts to combat habitat destruction, climate change, and other anthropogenic threats.

Future research should focus on how climate change and human activities will continue to shape bird populations and communities, as well as how conservation strategies can be tailored to support the most threatened species.

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Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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