

## Avian Diversity of Purulia : A Living Tapestry of Birds

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At first light in Purulia, the air comes alive with birdsong. From the chatter of mynas in village courtyards to the distant call of raptors over rocky hills, this western district of West Bengal reveals a remarkable richness of birdlife. Though often celebrated for its cultural heritage and rugged terrain, Purulia is equally significant as a biodiversity hotspot, especially for avian diversity shaped by its unique plateau ecosystem.

### Landscape and Habitat Diversity

Purulia forms part of the eastern fringe of the Chotanagpur Plateau and is characterized by undulating topography, lateritic soil, dry deciduous forests, and seasonal water bodies. The forests around are particularly important, dominated by sal (*Shorea robusta*), palash (*Butea monosperma*), and other native species. These forests provide nesting sites, shelter, and a continuous food supply for birds. The district also includes agricultural lands, village groves, and wetlands, each supporting distinct bird communities. This mosaic of habitats contributes significantly to the diversity and distribution of avifauna across seasons.



Fig:-Common and Frequently Observed Birds

### Common and Frequently Observed Birds

Purulia supports a wide range of resident bird species that are commonly seen throughout the year. These birds are well adapted to human-modified landscapes as well as natural ecosystems.

Table 1: Common Bird Species in Purulia

Sl. No.	Common Name	Habitat	Remark
1	Indian Peafowl	Forest edges, fields	National bird, commonly seen
2	Red-vented Bulbul	Gardens, shrubs	Highly adaptable
3	Common Myna	Urban and rural areas	Omnivorous
4	House Sparrow	Settlements	Declining in some areas
5	Black Drongo	Open fields	Known as "farmer's friend"
6	Rose-ringed Parakeet	Tree canopy	Flocks common
7	Asian Koel	Trees	Seasonal call during summer
8	Jungle Babbler	Bushy areas	Moves in groups
9	White-throated Kingfisher	Wetlands, fields	Bright and vocal
10	Cattle Egret	Grazing lands	Often seen with livestock

These birds contribute to ecological functions such as seed dispersal, pest control, and pollination, making them vital for maintaining ecosystem balance.

### Forest Birds and Specialized Species

The forested landscapes of Purulia several specialized bird species that depend on tree cover and relatively undisturbed habitats.

Notable species include:

- Indian Paradise Flycatcher
- Grey Hornbill
- Golden Oriole
- Rufous Treepie
- Crested Serpent Eagle

These birds are indicators of healthy forest ecosystems and are often sensitive to habitat disturbance.

### Rare and Occasional Sightings

Apart from common species, Purulia occasionally records sightings of rare and less frequently observed birds, especially in forest interiors and rocky hill regions.

**Table 2: Rare and Occasional Bird Sightings**

Sl. No.	Common Name	Habitat	Status
1	Indian Eagle-Owl	Rocky hills, cliffs	Rare
2	Brown Fish Owl	Near water bodies	Uncommon
3	Crested Hawk Eagle	Dense forest	Rare
4	Changeable Hawk Eagle	Woodland	Occasional
5	Indian Pitta	Forest floor	Seasonal migrant
6	Eurasian Wryneck	Open woodland	Rare winter visitor
7	Booted Eagle	Open landscape	Winter visitor
8	Shikra	Woodland edges	Occasionally seen
9	Barn Owl	Rural areas	Nocturnal
10	Spotted Owlet	Tree cavities	Less common



**Fig :- Rear Bird**

Among these, the **Indian Eagle-Owl** is particularly notable. This large nocturnal raptor prefers rocky outcrops and cliffs, making the terrain of Purulia ideal for its habitation. Though rarely seen, its presence indicates a relatively undisturbed ecosystem.

### Seasonal Migration and Bird Movement

Purulia also experiences seasonal variation in bird populations. During winter months, several migratory birds arrive from northern regions, particularly near water bodies and open

fields. These include wagtails, warblers, and certain raptors. The availability of food and favorable climate make Purulia a temporary refuge for these migratory species.

### Ecological Importance of Birds in Purulia

Birds in Purulia play a crucial role in maintaining ecological balance:

- **Insect control:** Species like drongos and mynas reduce pest populations
- **Seed dispersal:** Frugivorous birds help in forest regeneration
- **Pollination:** Some birds assist in pollination of flowering plants
- **Indicator species:** Changes in bird populations reflect environmental health

### Threats to Avian Diversity

Despite its richness, Purulia's birdlife faces several threats:

- Deforestation and habitat degradation
- Expansion of agriculture and urbanization
- Use of chemical pesticides
- Climate change affecting seasonal patterns

These factors may lead to a decline in both common and rare bird species if not addressed properly.

### Conservation and Future Prospects

Conservation of avian diversity in Purulia requires a multi-faceted approach involving both scientific management and community participation. Key measures include:

- Protection of forest habitats and hill ecosystems
- Promotion of organic and eco-friendly farming
- Conservation of wetlands and water bodies
- Awareness programs for local communities

Encouraging birdwatching and eco-tourism can also help generate awareness and economic incentives for conservation.

### Conclusion

The avian diversity of Purulia District is a testament to its ecological richness and environmental significance. From commonly observed species to rare sightings like the Indian Eagle-Owl, the district supports a wide spectrum of birdlife. This diversity not only enhances the natural beauty of the region but also contributes to ecological stability and sustainability. Preserving this avifaunal wealth is essential, not only for biodiversity conservation but also for maintaining the delicate balance between nature and human livelihood in this unique plateau ecosystem.