

## The vertebrate fauna of the Teachers' Quarters-2 of Saidpur Cantonment Public School and College, Nilphamari, Bangladesh

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**Abstract:** The Teachers' Quarters-2 of the Saidpur Cantonment Public School and College was established in the year 1996 and on nearly 20 decimals of land. Of 35 animals there were 3 reptiles (8.57% of the total), 30 birds (85.71%) and 2 mammals (5.71%). Among these, breeding animals were 11(31.43%). Highest birds were included in Sturnidae family which dealt four types of Myna (Grayheaded, Common, Jungle, Pied). In this quarters the north, east, and west portions were full of bushes with medium-sized fruit trees. Only Munia were found in the south on an electric pole. Kitchen thrown rice, curry, and waste materials, and various insects were the food items for these animals. Moreover, some ripe fruits, especially Black Berry and Indian Date were food for the Bulbul and the Greater Coucal. Because it is a protected restricted area, all animals are well fed and healthy. They are not disturbed by the common people. However, the predator Crow was present, which destroys birds nest and snatches egg and young from various species. For the conservation of the animals, this type of quarters could play an important role as a wildlife park which can be an enjoyable place for people as well. This study was conducted from 20 January 2014 to 12 March 2015 by the first author.

**Key words:** Monitor Lizard, Mongoose, Garden birds; Park birds; Residential birds; Cantonment birds.

### Introduction

The breeding status of birds in Bangladesh is remarkable despite the size of the country. Saidpur thana is located within the Nilphamari district of Bangladesh. The flora of this area is mostly comprised of evergreen species. For most of the time, insects are readily available food for birds. In the Saidpur Cantonment area, 34% of the birds are breeding. Due to less long trees the Eagles, Falcons, and Hawks are not available throughout Bangladesh. Most of the identified birds within this study are included in the Order Passeriformes (see Table 2). Breeding birds are found more commonly during the months of May, June, and July when insects are also abundant (Kabir, 2012). Low human disturbance is a significant inducement for increasing bird numbers. Decreasing wildlife species and numbers through urbanization and industrialization is a major problem in most countries (Gregory *et al.*, 2004). During the spring and summer seasons in England, 60% of birds are breeding there. Botanical gardens and residential backyards sometimes provide a significant reservoir for many bird species. In recent years, common bird species such as Sparrows, Starlings, and Thrushes have declined, mainly through loss of habitat for human habitation (Golley, 2004).

### Materials and Methods

**Animals:** Most of the surviving animals at the research site are birds due to their flying for escaping capability. For some bushes there some mammals living amongst the foliage and trunks. Burrowing reptiles such as Monitor-lizard and Jackal are accommodated through the ground being protected by vegetation. Only predator Crows are sometimes vulnerable for the nesting birds. Here animals make nests but ultimately most cannot display their young because of crow predation. Bubluls, Babbler, and Mynas are common and usually present. Many birds arrive from adjacent areas and inhabit the research site (Table 2; Figs. 1, 2 and 3).

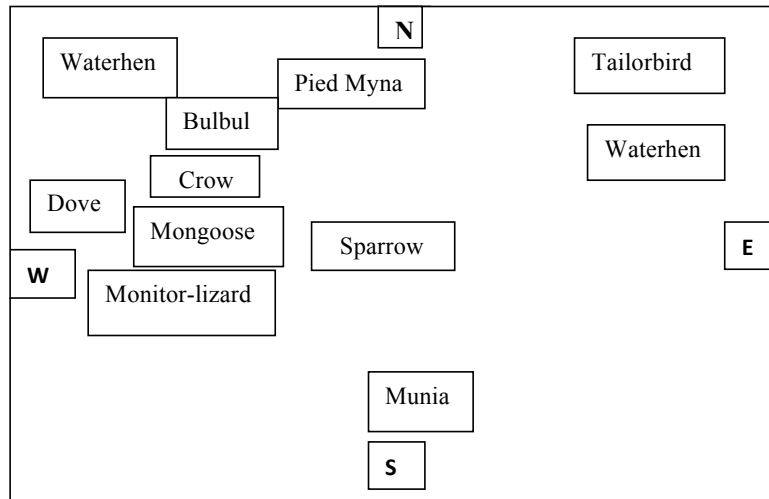


Fig. 1. Distribution of vertebrates within the teachers' quarters-2 grounds.

**Plants:**

English name	Bangla name	Scientific name	Family
Black Berry	Kalojam	<i>Syzygium cumini</i>	Mystaceae
Mango	Aam	<i>Mangifera indica</i>	Anacardiaceae
Banana	Kola	<i>Musa sapientum</i>	Musaceae
Jackfruit	Kathal	<i>Artocarpus heterophyllus</i>	Moraceae
Indian Date	Boroi	<i>Zizyphus jujuba</i>	Rhamnaceae
Sugar Date Palm	Khejur	<i>Phoenix sylvestris</i>	Arecaceae
Fig	Dumur	<i>Ficus hispida</i>	Moraceae
Debdaru	Debdaru	<i>Polyalthia longifolia</i>	Annonaceae
Spanish Cherry	Bokul	<i>Mimusops elengi</i>	Sapotaceae
Pomelo	Badam	<i>Citrus maxima</i>	Rutaceae
Red Cotton Tree	Shimul	<i>Bombax ceiba</i>	Malvaceae
Guava	Peyara	<i>Psidium guajava</i>	Myrtaceae
Papaw	Pepe	<i>Papaya sativum</i>	Caricaceae

Table 1. Available plants where animals were observed roosting or feeding on fruits.

**Results and Discussion**

Sometime people of the teachers quarters throw rice near or out of the kitchen window in order to attract birds. The Greater Coucal comes at the base of palm trees in order to feed on dates which have fallen from the trees. In the north-east portion there are some shrubs where the Mongoose and Striped Keelback Snake inhabit because of protection provided by the shrubs and small trees. At the rear of the quarters there are some banana trees (*Musa paradisiaca*, Musaceae) and at the base of these plants, the Jackal lives. At the west corner of the quarters, a pleasant watery reservoir provides habitat for the Heron, Kingfisher, and White-breasted Waterhen.

**Table 2.** Vertebrates observed at the research site with details on their breeding performance, nest type and date when first sighted.

English name	Scientific name	Family of animals	Breeding month	Nest types	First sight
Yellow Monitor-lizard	<i>Varanus flavescens</i> (Hardwicke and Gray)	Varanidae	April	Mud hole	28.4.14
Striped Keelback	<i>Amphiesma stolata</i> (Linnaeus)	Colubridae	Not seen	Not seen	20.01.14
Brahminy Blind Snake	<i>Typhlops braminus</i> , Cuvier	Typhlopidae	Not seen	Not seen	05.01.15
Eastern Spotted Dove	<i>Streptopelia chinensis</i> (Temminck)	Columbidae	All the year	Twig	25.01.15
Jungle Babbler	<i>Turdoides striatus</i> (Dumont)	Leiotherichidae	Not seen	Not seen	25.01.15
Red-vented Bulbul	<i>Pycnonotus cafer</i> (Linnaeus)	Pycnonotidae	February	Twig	25.01.15
Greater Coucal	<i>Centropus sinensis</i> (Stephens)	Cuculidae	Not seen	Not seen	25.01.15
House Sparrow	<i>Passer domesticus</i> , Jardine and Selby	Passeridae	February	Hole	25.01.15
Eurasian Tree Sparrow	<i>P. montanus</i> (Linnaeus)	Passeridae	February	Hole	24.01.15
Grayheaded Myna	<i>Sturnus malabaricus</i> (Gmelin)	Sturnidae	Not seen	Not seen	25.01.15
Indian Pied Myna	<i>S. contra</i> , Linnaeus	Sturnidae	March	Twig	25.01.15
Common Myna	<i>Acridotherus tristis</i> (Linnaeus)	Sturnidae	Not seen	Not seen	28.4.14
Crested Myna	<i>A. fuscus</i> (Wagler)	Sturnidae	Not seen	Not seen	17.02.15

Black-headed Oriole	<i>Oriolus xanthornus</i> (Linnaeus)	Oriolidae	Not seen	Not seen	25.01.15
Brown Shrike	<i>Lanius cristatus</i> , Linnaeus	Laniidae	Not seen	Not seen	25.01.15
Blue-throated Barbet	<i>Megalaima asiatica</i> (Latham)	Capitonidae	Not seen	Not seen	24.01.15
Little Scaly-bellied Green Woodpecker	<i>Picus xanthopygaeus</i> (JE Gray and GR Gray)	Picidae	Not seen	Not seen	04.01.15
Lesser Golden-backed Woodpecker	<i>Dinopium benghalense</i> (Linnaeus)	Picidae	Not seen	Not seen	27.01.15
White-breasted Kingfisher	<i>Halcyon smyrnensis</i> (Linnaeus)	Halcyonidae	Not seen	Not seen	16.02.15
Spotted Munia	<i>Lonchura punctulata</i> (Linnaeus)	Estrildidae	April	Domed	28.4.14
White-breasted Waterhen	<i>Amaurornis phoenicurus</i> (Pennant)	Rallidae	February	Platform	24.01.15
Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant)	Sylviidae	January	Stitched	23.01.15
Booted Warbler	<i>Hippolais caligata</i> (Lichtenstein)	Acrocephalidae	Not seen	Not seen	28.01.15
Indian Pond Heron	<i>Ardeola grayii</i> (Sykes)	Ardeidae	Not seen	Not seen	22.01.15
Black-headed Cuckoo Shrike	<i>Coracina melanoptera</i> (Ruppell)	Campephagidae	Not seen	Not seen	07.02.15
Red-breasted Flycatcher	<i>Muscicapa parva</i> (Bechstein)	Muscicapidae	Not seen	Not seen	24.01.15
Oriental Magpie-robin	<i>Copsychus saularis</i> (Linnaeus)	Muscicapidae	Not seen	Not seen	25.01.15
Common Iora	<i>Aegithinia tiphia</i> (Linnaeus)	Aegithinidae	Not seen	Not seen	08.3.15

Great Tit	<i>Parus major</i> , Linnaeus	Paridae	Not seen	Not seen	12.3.15
Black Drongo	<i>Dicrurus macrocercus</i> (Vieillot)	Dicruridae	Not seen	Not seen	17.02.15
Indian Treepie	<i>Dendrocitta vagabunda</i> (Latham)	Corvidae	Not seen	Not seen	19.01.15
House Crow	<i>Corvus splendens</i> , Vieillot	Corvidae	March	Twig	25.01.15
Common Mongoose	<i>Herpestes edwardsii</i> (Geoffroy)	Herpestidae	May	Mud hole	25.01.15
Golden Jackal	<i>Canis aureus</i> , Linnaeus	Canidae	Not seen	Not seen	29.01.15

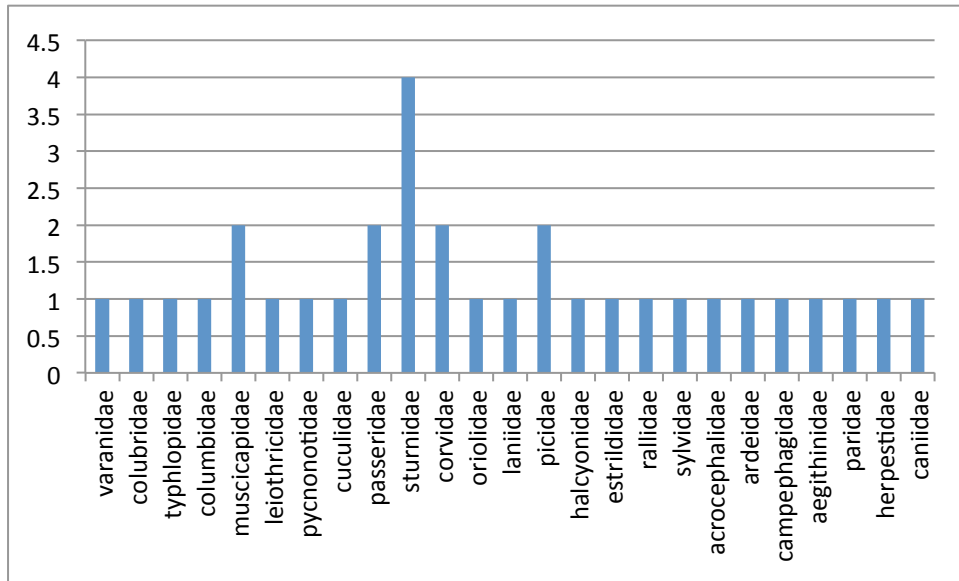


Fig. 2. Family-wise abundance of vertebrates in the teachers' quarters-2.

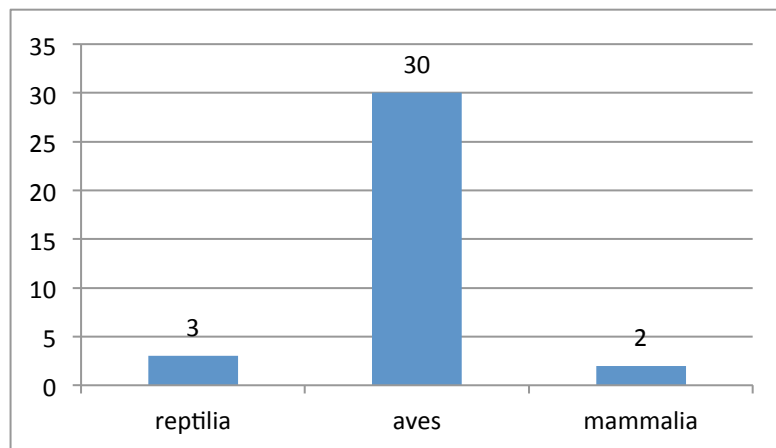


Fig. 3. Total numbers of the three vertebrate groups.

The dead body of the Common Blind Snake was once found under the slab of the footpath inside the quarters. Although crows are a scavenging bird, some dead bodies of this bird were found to be accidentally electrocuted. The area of cantonment is mostly protected and is not altered by the resident humans so that the biodiversity is remarkable. Nine birds in quarters made nest while the Monitor-lizard and the Mongoose focused with their young.

**Feed:** Termites, ants, mole crickets, millipedes, centipedes, mosquitoes, rice, fruits, and kitchen garbage are the food of these animals. Sometimes, due to badly rotten and decomposed or poisonous food, Crows are found dead around the dustbins at the south corner of the complex.

**Ecosystem:** Though the study area is small there is a wide diversity of food items such that the food chain and food web is diversified with strong links which are important for the stability of these animal populations. Here insects are the main source of vertebrate food. Producer and primary consumers are the main trophic levels of this ecosystem. Insects play an important role in the ecosystem within the Teachers' Quarters. Crows' community are the dominating birds group which acts as predator birds and it destroys nest or snatch egg and young of most birds.

The following Table 3 outlines an excellent functioning ecosystem for various vertebrates. The observed area was shrubby which provides many protective niches.

**Table 3.** Food chain among animals

Animals	Food chain
Yellow Monitor-lizard	Yellow Monitor-lizard ← Striped Keelback ← Brahminy Blind Snake ← House Crow ← White-breasted Waterhen ← Common Mongoose
Striped Keelback	Striped Keelback ← insects
Brahminy Blind Snake	Common Blind Snake ← insects
Eastern Spotted Dove	Eastern Spotted Dove ← insects, seed, grain
Oriental Magpie-robin	Oriental Magpie-robin ← insects
Jungle Babbler	Jungle Babbler ← insects
Red-vented Bulbul	Red-vented Bulbul ← rice, insects, curry
Greater Coucal	Greater Coucal ← insects, berry
House Sparrow	House Sparrow ← insects ← rice
Eurasian Tree Sparrow	Eurasian Tree Sparrow ← insects ← rice
Gray-headed Myna	Gray-headed Myna ← insects, rice, curry
Indian Pied Myna	Indian Pied Myna ← insects, rice, curry
Crested Myna	Crested Myna ← insects
Common Myna	Common Myna ← insects, rice
House Crow	House Crow ← rice, flesh
Indian Treepie	Indian Treepie ← insects, small birds, egg
Black-headed Oriole	Black-headed Oriole ← insects
Brown Shrike	Brown Shrike ← insects
Blue-throated Barbet	Blue-throated Barbet ← berry
Little Scaly-bellied Green Woodpecker	Little Scaly-bellied Green Woodpecker ← insects
Golden-backed Woodpecker	Golden-backed Woodpecker ← insects
White-breasted Kingfisher	White-breasted Woodpecker ← insects
Spotted Munia	Spotted Munia ← insects
White-breasted Waterhen	White-breasted Waterhen ← insects
Common Tailorbird	Common Tailorbird ← insects
Booted Warbler	Booted Warbler ← insects
Great Tit	Great Tit ← insects
Common Iora	Common Iora ← insects

Indian Pond Heron	Indian Pond Heron← insects
Black-headed Cuckoo Shrike	Black-headed Cuckoo Shrike← insects
Red-breasted Flycatcher	Red-breasted Flycatcher← insects
Black Drongo	Black Drongo← insects
Indian Treepie	Indian Treepie← insects, birds eggs, small birds
Common Mongoose	Common Mongoose← insects, pigeons, small birds
Golden Jackal	Golden Jackal← small animals, small birds

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