

Preliminary report on the Bird Diversity in the Veterinary College Campus, Puducherry

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Peninsular India has been well known for its rich bird diversity. With its positive climatic conditions, South India is home for a wide variety of birds. Most of the regions of South India, covered by the States of Tamil Nadu, Kerala, Andhra Pradesh and Karnataka have seasonal rainfall comprising two monsoons annually. Over and above this, non-seasonal rainfall also is received well in these regions. Hence, the vegetation of these regions tend to be moderate to thick with overlying areas of marshy as well as barren lands.

Puducherry (Pondicherry) is a vibrant coastal town along the east coast bordered by the Bay of Bengal. It is bordered on the north, west and south by Tamil Nadu. Hence, its climate is very similar to that of the adjoining regions of Tamil Nadu. The plant diversity is also similar to that of the surrounding state. However, one major difference is that the Puducherry region was till recently, deficient in rainfall when compared to its neighbour. It receives only the North-East monsoon during the months of October – December. Even during this period, the rainfall is mild and the average rainy days often number in the range of 7-11 only.

Puducherry town lies near to the Kaliveli Watershed region which is recognised as an important wetland in the south-east coastal area of India. The avifauna of this region has been well studied – as evident from various reports (Perennou, 1987; Perennou & Santhanam, 1990; Balachandran, 1994; Ramanujam & Ambarasan, 2007). Since it was felt that knowledge about the birds of specific sites in the region will facilitate understanding the avifauna better, the results of a monitoring programme on the bird diversity in the campus of Rajiv Gandhi College of Veterinary and Animal Sciences are presented.

The area under study comprised the main campus of the Rajiv Gandhi College of Veterinary and Animal Sciences located at Kurumbapet village in Puducherry. The campus consists of two zones separated by a part of the Perunthalaivar Kamaraj Krishi Vigyan Kendra. The two zones of the campus together cover an area of 58 acres. This location is about 5 km from Puducherry town in the westerly direction. The campus is in the immediate vicinity of industrial area, being bordered on the west by the units of Hindustan Lever Ltd. and the campus of the Pondicherry milk plant (Ponlait). On the eastern side, the outlying residential zone is bordered by the Anglo-French textiles and on the north by the Vazhudavur road. On the south, the campus is bordered by the Krishi Vigyan Kendra as well as a stretch of cultivable land, part of which had been lying barren for a long period.

Different species of grown up trees like neem, mango tree, palm, cashew tree, acacia, rain tree, sapota, coconut tree etc. and a wide variety of shrubs and grasses that support and provide nesting sites for many species of resting and local migratory birds are present in the campus. An artificial pond used for rearing fresh water fishes and an area of about 1 ha., with a lot of trees, shrubs and grasses which have been left almost undisturbed since the inception of the college (14 years back) add to the diversity of bird habitat in the campus. The location of the campus being adjacent to the wetland paddy fields of the Krishi Vigyan Kendra and near to the Ossoudu (Ousteri) lake which was recently declared as a bird sanctuary also adds on to the richness of bird population.

Methodology

Birds were observed and identified in the morning, around noon and early afternoon and evening at different parts of the campus. Observations were made individually by the members of the group from their own random positions within the campus and recordings were made accordingly. These records of observations were then compiled to derive the final data.

The data pertaining to 10 years from 1997 – 2007 form the bird list. Changes in the bird richness during the period under study were also listed out so as to identify new additions, commonly found / very commonly found species and rarely found species in the campus. Those birds observed in the campus throughout the year in greater frequency were designated as very common, while those with lesser frequency as common. Rare birds were those who were migratory in habit and spotted in the campus only in particular season. Standard field guides to the identification of birds were used for the correct identification of birds of each of the species (Ali, 2002; Ali & Ripley, 1987).

Observations and Results

Over a period of 10 years, 65 species of birds were recorded in the campus. The list of bird sightings in the campus has been presented in Table-1.

Out of the different species of birds identified, 13 were found to be very common in the campus. Order Passeriformes has the maximum representation. The 34 species of birds were from this order and included in nine families, viz. Pittidae, Irenidae, Corvidae, Muscicapidae, Sturnidae, Pycnonotidae, Silvidae, Nectarinidae and Passeridae. Ten species of birds out of the 34 species, belonging to the order Passeriformes are found to be very common; seven are common and the rest, rare. The other orders represented were Galliformes, Piciformes, Upupiformes, Apodiformes, Strigiformes, Columbiformes and Ciconiiformes. The three other species of birds designated as very common come under the orders Apodiformes and Columbiformes.

Birds like House Crow *Corvus splendens*, Jungle Crow *Corvus macrorhynchos*, Common Myna *Acridotheres tristis*, Black Drongo *Dicrurus macrocercus*, Indian Treepie *Dendrocitta vagabunda*, Indian Pitta *Pitta brachyura*, Blue Rock Pigeon *Columba livia*, Spotted Dove *Streptopelia chinensis*, Rose-ringed Parakeet *Psittacula krameri*, Shikra *Accipiter badius*, Grey Francolin *Francolinus pondicerianus*, Asian Palm Swift *Cypsiurus balasiensis* and Spotted Munia *Lonchura punctulata* have adapted totally to the campus. A few species like Pied Crested-Cuckoo *Clamater jacobinus*, Hoopoe *Upupa epops*, Asian Paradise-Flycatcher *Terpsiphone paradisi* and Small Minivet *Pericrocotus cinnamomeus* have been found in the campus as seasonal visitors.

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Table 1. List of bird sightings in the Veterinary College, Puducherry campus

Classification	Scientific Name	Common Name	Status
Galliformes	<i>Francolinus pondicerianus</i>	Grey Francolin	C
Phasianidae	<i>Pavo cristatus</i>	Indian Peafowl	R
Piciformes			
Megalimidae	<i>Megalaima haemacephala</i>	Coppersmith Barbet	C
Picidae	<i>Celeus brachyurus</i>	Rufous Woodpecker	R
	<i>Dinopium benghalense</i>	Lesser Golden-backed Woodpecker	R
	<i>Dinopium javanense</i>	Common Golden-backed Woodpecker	C
Upupiformes			
Upupidae	<i>Upupa epops</i>	Common Hoopoe	R
Coraciiformes			
Alcedinidae	<i>Alcedo atthis</i>	Small Blue Kingfisher	R
	<i>Halcyon smyrnensis</i>	White-breasted Kingfisher	C
	<i>Ceryle rudis</i>	Lesser Pied Kingfisher	R
Meropidae	<i>Merops orientalis</i>	Small Green Bee-eater	R*
Cuculiformes			
Cuculidae	<i>Hierococcyx varius</i>	Brainfever Bird	R
	<i>Clamater jacobinus</i>	Pied Crested Cuckoo	R
	<i>Eudynamys scolopacea</i>	Asian Koel	C
Centropodidae	<i>Surniculus lugubris</i>	Drongo Cuckoo	R
Psittaciformes			
Psittacidae	<i>Psittacula krameri</i>	Rose-ringed Parakeet	C
Apodiformes			
Apodidae	<i>Apus affinis</i>	House Swift	R
	<i>Cypsiurus balasiensis</i>	Asian Palm Swift	VC
Strigiformes			
Tytonidae	<i>Tyto alba</i>	Barn Owl	R
	<i>Tyto longimembris</i>	Eastern Grass Owl	R
Srtigidae	<i>Bubo bengalensis</i>	Indian Eagle Owl	R
	<i>Athene brama</i>	Spotted Owlet	C
Columbiformes			
Columbidae	<i>Columba livia</i>	Blue Rock Pigeon	VC
	<i>Streptopelia chinensis</i>	Spotted Dove	VC
Ciconiiformes			
Charadriidae	<i>Vanellus indicus</i>	Red-wattled Lapwing	R
Pteroclididae	<i>Pterocles exustus</i>	Chestnut-bellied Sandgrouse	R
Ardeidae	<i>Bubulcus ibis</i>	Cattle Egret	R
	<i>Ardeola grayii</i>	Indian Pond Heron	R
Falconiformes			
Accipitridae	<i>Haliastur indus</i>	Brahminy Kite	R
	<i>Milvus migrans</i>	Black Kite	C
	<i>Accipiter badius</i>	Shikra	C
Passeriformes			
Pittidae	<i>Pitta brachyura</i>	Indian Pitta	R
Irenidae	<i>Chloropsis cochinchinensis</i>	Jerdon's Chloropsis	R
	<i>Aegithina tiphia</i>	Common Iora	R
Camphiphagiidae	<i>Tephrodornis pondicerianus</i>	Common Woodshrike	R
	<i>Pericrocotus cinnamomeus</i>	Small Minivet	R
	<i>Coracina melanoptera</i>	Black-headed Cuckoo-Shrike	R
	<i>Coracina macei</i>	Large Cuckoo- Shrike	R
Coracidae	<i>Coracis benghalensis</i>	Indian Roller	R
Corvidae	<i>Dendrocitta vagabunda</i>	Indian Treepie	VC
	<i>Corvus splendens</i>	House Crow	VC
	<i>Corvus macrorhynchos</i>	Jungle Crow	VC
Oriolidae	<i>Oriolus oriolus</i>	Eurasian Golden Oriole	R
	<i>Oriolus xanthornus</i>	Black-headed Oriole	R
Monarchidae	<i>Terpsiphone paradise</i>	Asian Paradise-Flycatcher	R
Dicruridae	<i>Dicrurus macrocercus</i>	Black Drongo	VC

Musicapidae	<i>Copsychus saularis</i>	Oriental Magpie- Robin	C
	<i>Saxicoloides fulvicata</i>	Indian Robin	C
	<i>Myiophonus horsfieldii</i>	Malabar Whistling- Thrush	R
Sturnidae	<i>Acridotheres tristis</i>	Common Myna	VC
	<i>Sturnus pagodarum</i>	Brahminy Starling	R*
Pycnonotidae	<i>Pycnonotus cafer</i>	Red-vented Bulbul	VC
	<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	C
Silvidae	<i>Turdoides caudatus</i>	Common Babbler	VC
	<i>Turdoides affinis</i>	White-headed Babbler	R
	<i>Orthotomus sutorius</i>	Common Tailorbird	VC
Nectarinidae	<i>Nectarinia asiatica</i>	Purple Sunbird	VC
	<i>Nectarinia lotenia</i>	Loten's Sunbird	R
Dicaeidae	<i>Dicaeum concolor</i>	Plain Flowerpecker	C
Motacillidae	<i>Anthus rufulus</i>	Paddyfield Pipit	R
	<i>Motacilla flava</i>	Yellow Wagtail	R
	<i>Motacilla maderaspatensis</i>	Large Pied Wagtail	C
Estreldidae	<i>Lonchura punctulata</i>	Spotted Munia	VC
	<i>Lonchura malacca</i>	Black-headed Munia	C
Passeridae	<i>Passer domesticus</i>	House Sparrow	R

Note: **VC** – Very Common **C** – Common **R** – Rare **R*** - Initially recorded not found at present

Considerable variation in the bird richness was noticed over the above period with some species disappearing from the campus like Brahminy Starling *Sturnus pagodarum* and Small Bee-eater *Merops orientalis*, while some species colonizing. Certain species like House Sparrow *Passer domesticus* which were common in the campus in the beginning of the study disappeared over a considerable period of time and made a re-appearance towards the end of the study period. It was also interesting to note that species like Indian Treepie and Blank Drongo have increased in number recently, with many nesting sites found in the campus.

Discussion

Some of the species of birds were rarely seen in the campus. The rare sighting of Small Blue Kingfisher *Alcedo atthis* may be linked to the seasonal / occasional activity of fish rearing in the artificial pond. The Drongo Cuckoo *Surniculus lugubris* was spotted only three times during September-October, 2004. They were invariably perched on green canopy trees in the same area of the campus. The lone sighting of Eastern Grass Owl *Tyto longimembris* was in February, 2003, when one bird had taken refuge indoors during day time, trying to escape from crows which were pursuing it.

The period under study has seen many changes in the pattern of rainfall in the campus. The early phase was marked with very heavy summer showers against a normally nominal seasonal rainfall. However, the pattern changed drastically towards the end phase of the study, with the region receiving moderate to heavy rainfall both during the monsoon season and other times. This had a positive influence in the growth of vegetation of all types resulting in many areas of the campus offering a green canopy. At the same time, the fruit bearing trees and cultivated areas in the campus were ensured to be free from

insecticides over a few years. These two factors probably had a positive effect in the progression of insect population in the vicinity. These features were thought to be the reason behind a general increase in the bird population in the campus.

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