

Birds of Our Garden Premises In West Midnapore District of West Bengal, India

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Abstract- *Birds are very important because they help us in various ways and are a centre of attraction to us. Including plants and animals, all the tiny creatures have a great role in an ecosystem. Apart from the above one birds are important from specific point of view because they help us to delimitate our monotony. They do various activities from dawn to dusk for their own. Our garden is a destiny of birds but not only our garden, other gardens of all citizens have a good role to protect birds in various ways in which we can see them and record the behaviour which they perform from morning to evening. The roosting, nesting, feeding, drinking, bathing, splashing in water, dusting, anting, sun bathing and oiling round the day make vivid activity acting by various birds. These are some social behaviour of birds. Some birds visit garden plants, on surface soils, over the bushes and canopy of trees with other birds round the day but collection of the food from different habitats are specific for one kind of birds. The trophic level and structure differs from a group to other due to the varied characters and versatile collection pattern of materials from food to nest. Some birds stay at buildings but others stay at trees and holes with flocks. A large number of migratory birds visit during winter and in summer where they found singly or in flocks. Good example is yellow footed green pigeon. In this article we have made a general discussion on garden birds in our own premises with vegetation strata. This paper would be helpful instructor to guide everybody for protecting birds in their surroundings. We can help them through this idea and can make a peaceful environment for the protection of avifauna of local kind. Simultaneously, birds help us as bio-indicator or as bio-pesticide to protect our fruiting trees, shrubs and herbs of potentially economic kind.*

Keywords- Garden birds, Midnapore town, Vegetation structure, ecosystem and management

I. INTRODUCTION

A garden is situated behind my house. This garden has many plants, fruiting trees and big trees. These plants and fruits provide a good food for birds that visit my garden. There is also a water tap which provides a place for the bird to drink water, bath in water and splash in water, mostly during summer. So many birds visit my garden throughout the year.

Not only birds some other animals such as squirrels, lizards, rats and monkeys also visit this garden. The monkeys mostly visit the garden when there are lots of mangoes in the mango trees. The seven sisters (*Turdoides striata*) feast upon the mango inflorescence and coconut that they found in the thrown coconut shells. The red-vented bulbul (*Pycnonotus cafer*) eats the thrown apple peels, and fruit peels such as guava, pear, etc. Some other birds such as spotted munia feed upon the small berries of Lantana and some seeds of grass. The trees also provide a place for birds to rest and roost during hot summer. During the summer the weather is hot and dry and some of the trees of my garden are shady and cool so, the birds rest or roost there. Such as Indian pitta (*Pitta brachyura*) rests on the mango tree and eats the mangoes. Some birds carry nesting materials from my garden like small sticks, dried leaves and sticks, small leaves etc. such as the rock pigeon (*Columba livia*) picks sticks from my gardens and build a nest on the corner of the roof of my balcony which can be seen from my garden. The rock pigeon choose my balcony for nesting because it is in a safe place and there is a food and water supply in my garden and as the nest can be seen from my garden so the mother pigeon can keep an eye on her nest while she is gathering food. The barn owl (*Tyto alba*) comes during evening and eats some rats and drinks water and baths in water and goes. Many birds visit my garden in my presence and absence. Some of the birds are: Indian pitta, Jungle babbler, Red-vented bulbul, Rock pigeon, Spotted munia, Red whiskered bulbul, Spotted dove, Eurasian collared dove, Tailor bird, Lesser goldenback, Black-naped oriole, Black-hooded oriole, Indian golden oriole, Raven, House crow, Sparrow, Asian koel, Rose ringed parakeet, Coppersmith barbet, Brown-headed barbet, Blue throated barbet, Oriental magpie robin, Purple sunbird, White wagtail, yellow wagtail, purple-rumped sunbird, barn owl etc.

II. AREA UNDER STUDY INCLUDING MICROCLIMAX

The area was my garden that was behind my house situated at Barisal Colony, Near Sitala Mandir, Sepoy Bazar Girja Goran, Paschim Medinipur District, West Bengal, India. It is a nice place which filled with good number of trees like *Mangifera anidica*, *Bombax ceiba*, *Polyalthia longifolia*,

Anthocephallus cadamba, Nyctanthes arbour-tristis, Cocos nucifera, Musa balbiciana, Sapindus trifoliatus, Seraca ashoca, Michelia champaca, Murraya koeignii, Muraya exotica, Psidium guajava, Trema orientalis and Anona squamosa. Herbs and shrubs found in a large number in the ground as well as in earthen pots. The important plants planted here are Ichnocarpus fruticens, Asparagus racemosus, Aristolochia indica, Sterculia foetida, Mimosa elengi, Lagerstroemia indica including various Crotons and Dracaena. Beautiful bushy sites in my house encourage a large number of birds due to a gentle slope with small pond filled with small aquatics. As a whole our study area was fine landscape to boost a large number of birds.

III. MATERIALS AND METHODS

Garden in our area occupies in a small piece of land but for general consideration we used nearby bushy trees and shrubs along with high drains, ponds and other vegetation which are seen from our roof of the building and very close to monitor. Canon Powershot A1200 HD camera and binocular 30 x 60 were used. To record the sound and bird call Swipe tab recorder was used. Morning from dawn and evening from dusk were used since 2015 to 2018 regularly. Sometimes in holidays we used whole day round the clock to record the roosting nesting, sitting on ground even flying were recorded for each species. Some standard literature was used including listed literature used here 1-11. We used tap water to flood the garden even water was used to fill the earthen pot to attract birds during hot summer. Some fruits, husk of Coconut, ripe but semi rotten fruits were placed in garden to attract birds. We planted papaya (*Carica sp.*), custard apple, mango, sunflower, chilly plant to attract specific birds. In earthen pots Lantana and Asparagus plants were planted to get fruits by which birds attracted.

IV. RESULT AND DISCUSSION

So, we have taken the study material for birds from our area to record the list of birds in our territory including study of some social behaviour. The present study includes some birds attracted in our garden. These are red vented bulbul, red whiskered bulbul, jungle myna, bank myna, common myna, Asian koel, brainfever bird, brown shrike, Indian roller, common kingfisher, white breasted water hen, scaly breasted munia, black throated munia, black drongo, house crow, northern raven, spotted owl, barn owl, coppersmith barbet, blue throated barbet, brown headed barbet, fulvous breasted woodpecker, lesser goldenback, Indian pond heron, black crowned night heron, black-hooded oriole, black-naped oriole, Asian paradise flycatcher, common sandpiper, intermediate egret, yellow footed green pigeon,

white breasted kingfisher, stork billed kingfisher, oriental magpie robin, jungle babbler, Asian pied starling, chestnut tailed starling, common hoopoe, great cormorant, little cormorant, rufous treepie, oriental darter, purple sunbird, house sparrow, Eurasian collared dove, night heron, spotted dove, laughing dove, rock pigeon, paddy field pipit, ashy headed sparrow lark, common chiffchaff, greater coucal and green bee-eater. Some birds listed here are nocturnal like barn owl and spotted owl. The spotted owl and night heron are nocturnal but are also seen during day time. Only these two nocturnal birds are observed by me in my study area. May be more are there, so need regular observation. Other birds are diurnal but sometimes the greater and lesser coucals are seen in night times. The bee eaters also stay till 7: 30 p.m. during late monsoon. This is the highest time the bee eaters stay. Black drongos catches insects during night in presence of street light because insects are attracted towards the light. So the drongos sit near the light on the electric poles and on electric wires. In the early morning we have seen spotted owlets on banyan tree but they fly freely from one big tree to another mango tree. Crows follow the spotted owlets in that time. As per the observation we have collected behaviours of some birds. These are given below:

Yellow footed green pigeon appear in large flocks in a whole banyan tree found nearby. They will feed on the fruits till evening, and then they will go to residence which is on other trees. Next day at early morning when no people come to the area for jogging they will start feeding on the fruits. They do this because they are afraid of people, and when the people start coming to that area they hide and feed on the fruits. They will not stay in a tree after its fruits are over. They will go to other trees nearby after seeing the fruits on those nearby trees. After the whole area's tree's fruits are over they will go to another area. This means that they go to another area searching for food. In a whole week they will finish a whole tree's fruits. In our station, a very large banyan tree appears with many fruits on it, but I observed no yellow footed green pigeon is there. This is because they are afraid of people. Under that tree there is a shop, in that shop many people come and buy things so there will always a crowd over there and so much noise, that's why yellow footed green pigeons do not come there.

White breasted water hen nests on debdaru tree (*Polyalthia longifolia*) on its forks. It gives four eggs. There is no father only a mother means a female white breasted water hen gives the eggs and took care of the chicks. But in case of other birds, the male also takes care of the chicks but in the water hen's case. In this case only there is a mother which takes care of the babies. I could not see the new born babies but after some days the babies started walking. They look like

small black fluffy cotton balls when seen from far away, but they really were very small. When the mother went to nearby marshy pond to gather food for the babies, the babies did not walk after the mother instead of that the freely walked everywhere and got lost, but anyhow the mother would gather the babies and take them to the nest again. Once there was a heavy rain in that area and the drains were flooded, one of the babies was walking near the drain, I thought that the mother would again take the baby back to the nest but the mother did not do that, so the baby fell into the drain and was also flooded along with the water. After some weeks when the babies grew, they and their mother left the nest and went somewhere that was out of my knowledge. Then after some days the nest was broken somehow and the tree was cut. But after some days I saw them roaming and staying in a nearby bamboo thicket. Spotted dove roosts on big woody trees like mango, margosa, peepal, banyan etc. in noon and afternoon. When other doves like Eurasian collared dove sits on the same tree where the spotted dove is roosting the spotted dove allows it to sit on the same tree, but when other birds like green bee-eaters sit on the same tree the spotted dove did not allows it to sit on the same tree instead it fights with it and sends it away from the tree. When it roosts it calls differently, after its calling is finished another spotted dove from somewhere comes there and sits there for some times and again flies somewhere else. But when another spotted dove sits on the tree the spotted dove which was already sitting on the same tree did not fights with it. When the sun sets the spotted dove which was sitting on the tree flies away and another bird comes and sits in its place. Wagtails such as white wagtail, yellow wagtail and citrine wagtail bath in small water body sides in the evening. They do this after the whole day passes, they do this to clean themselves after a whole day's work. They come to small water bodies in a flock of ten to twelve. They bath, roam and search food to eat, and stay there for a little while and go their nests. They wash their feathers and their body. First they come and eat and then bath, they do this because if first they clean themselves and then roam around to search food to eat, the sand dust will again make them dirty, so they eat first and then bath. If any animal such as dog come there to drink water, the wagtails will fly away from there because they are afraid. Green bee-eaters come to an area filled with sand and small pebbles in a large flock. There are 40 to 50 in a flock. They then will sit in a row there and dust for a long time; they also sometimes fight, play and do many things that are out of my knowledge. If any person or any animals come there they will fly and sit in a row on the electric wire and when the animal goes, they will again come and dust.

V. CONCLUSION

Our conclusion is that every house should have a garden with big trees, fruiting trees, shrubs, bushes with berries and a water source such as fountain or small area of water. If this thing is done in every house the birds will visit and have no deficiency of water and food, our garden will be beautiful and the ecosystem will have a beautiful and good scenario. We can make our gardens beautiful by planting more and more trees, flowering plants, fruiting plants. If we plant flowering plants the butterflies will visit our garden, if we plant fruiting plants the birds and other animals will visit our gardens, if we keep a water source in our garden many animals will visit it and drink water, bath in water and they will have no deficiency of water though the hot summer. We have to keep this thing in every house and save the birds and the animals. We have to save them because they protect our environment, nay ecosystem also. Plants get ready to onset the ground after ready dispersal of seeds through birds. During germination seedling are being affected by a large number of microbial organisms which grow and help to grow plants in various ways. Therefore, to keep the environment vegetation rich by the help of birds we need special protection on our garden plants. They also provide birds who help pollination, scavenging activities and good indicators of various ecosystems. The small birds are the prey of some predators like raptors, vultures etc. as a ready source of nutrient which is not only for our gardens, forests, wastelands but applicable in case of large woodland ecosystem. From dawn to dusk the birds give us melodious songs by chirping near our houses that refreshes our minds. Birds are also natural time indicators. Such as the birds chirp when it is morning, they chirp when it is evening. When it is eclipse of the sun the birds think that it is evening so they chirp. So, we can identify the time by hearing there calls. Birds are helpful to us and the ecosystem in many ways so we should be also helpful to them by providing them food, water and safe place to live. Everybody should make an environment eco-friendly in their premises to make a sound atmosphere to protect birds. Not only that the premises would be a lovely area for bats and other night birds who have the characteristic features to visit the areas as nocturnal one. Hope that this paper would transfer knowledge based interest to all citizens to make a sound environment for biodiversity conservation where trophic levels might be a proper blanket to cover all the organisms under a single umbrella.

VI. PHOTOGRAPHS CAPTURED



Figure 1. Asian Pied Starling on Bomax ceiba tree during flowering in Feb, 2017



Figure 4. Jungle Babbler

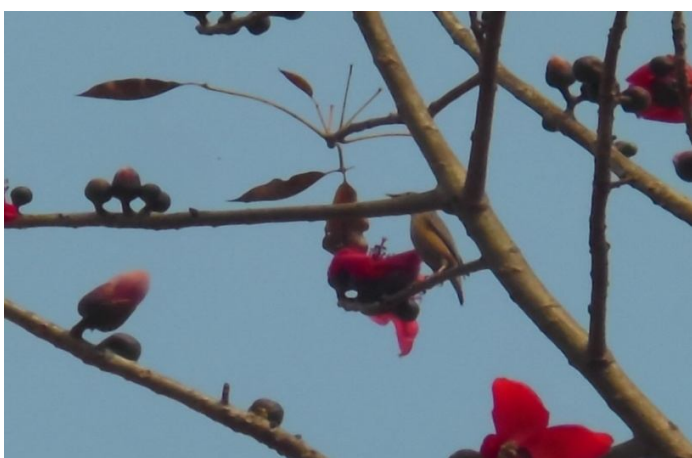


Figure 2. Chestnut tailed starling at same place in Midnapore Town



Figure 5. Roosting of Chatare (Jungle babbler/Seven sisters) on Margosa tree



Figure 3. Jungle Myna on a teak tree



Figure 6. Horizontal,



Figure 7. Vertical



Figure 8. Upside down position of Tailor bird



Figure 9. Slightly vertical,

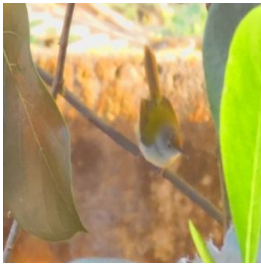


Figure 10. Upside down (Top view),

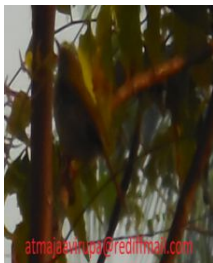


Figure 11. Slanting of Tailor bird



Figure 12. Common hawk-cuckoo or Brain fever (Hierococcyx varius)



Figure 13. Doyel (Front view),



Figure 14. Doyel Lateral view in a garden above gate light



Figure 15. Doyel (Copsychus salurris) busy in morning,



Figure 16. Calling Doyel



Figure 17. Purple-rumped sunbird



Figure 18. Purple sunbird (Male)



Figure 22. White throated Kingfisher-A state bird of West Bengal



Figure 19. White breasted water hen (Back view),



Figure 20. Front view in a pond of the same

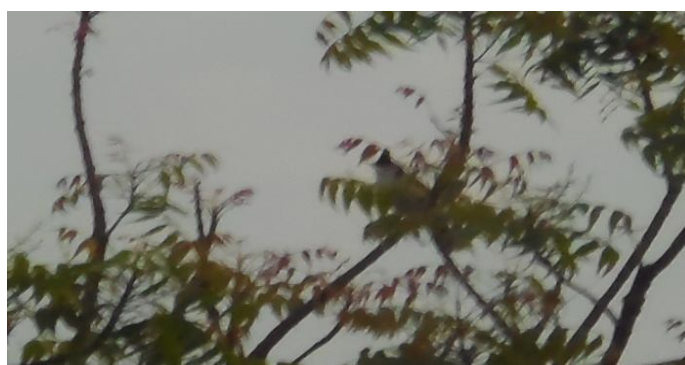


Figure 23. Red whiskered Bulbul

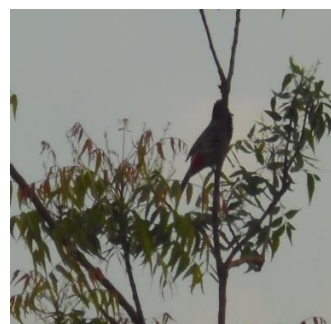


Figure 24. Red vented Bulbul (Right lateral),



Figure 21. Roosting of spotted Dove on a tree



Figure 25. Bulbul (Back view)



Figure 26. Red vented Bulbul in pair (Male and Female),



Figure 27. Same (Magnified)



Figure 28. Asian Koel (Male) roosting on Margosa tree



Figure 29. Asian Koel (Female) roosting on Margosa tree



Figure 30. Rock Dove in a garden (Female)



Figure 31. Black-hooded Oriole (*Oriolus xanthornus*)



Figure 32. House Sparrow (Male)

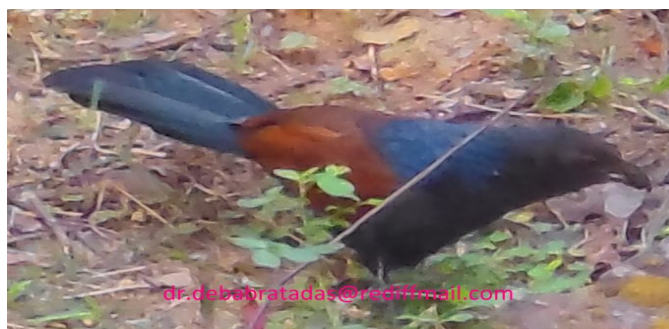


Figure 33. Coucal in a garden



Figure 34. A flock of Jungle Myna on a tree



Figure 35. Frugivorous bird in our garden, Garden showing Bacopa sp.

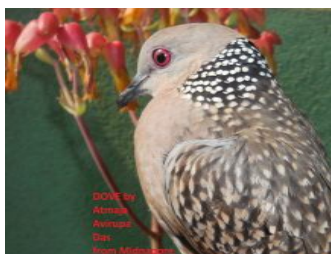


Figure 36. Spotted Dove near Life plant,



Figure 37. Same during feeding



Figure 38. Black Crowned Night Heron (A nocturnal bird)

VII. ACKNOWLEDGEMENTS

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