

OBSERVING BIRDS: CONNECTING WITH OUR NATURAL ENVIRONMENT



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Exploring birds in one's own neighbourhood provides an opportunity to help children and adults develop the skill of observation. Can it also provoke curiosity towards their own immediate surroundings? Can it build greater awareness of and sensitivity towards the natural world at large? We share our experience.

Observing the natural world engages, nurtures, empowers, and enlightens us. Bird watching offers a widely appealing, fun-filled, and aesthetically pleasing way of encouraging the cultivation of this skill in both children and adults. This activity is also believed to increase an individual's awareness and sensitivity towards the natural world – both of which are believed to shape how people respond to environmental challenges (see Box 1). They are also considered key competencies in enabling children to contribute towards the vision of sustainable development (see Box 2).

Before the pandemic, we were engaged in bird watching through regular group visits to the water bodies (lakes, rivers, wetlands and seashores) and forests in Puducherry. When this routine was disrupted by pandemic-related restrictions in movement and gathering in groups, we were faced with two questions – is it possible to encourage children and adults to explore birds in their own neighbourhoods? What kind of resources and support would be needed to equip beginners to engage in this activity individually rather than as a group?

Box 1. Responding to environmental challenges:

- According to The Tbilisi Declaration (1987), environmental education must aim to sensitize people with knowledge, attitudes, and skills to identify, understand and solve environmental problems, and participate in environmental dialogues (Tbilisi Declaration, UNESCO-UNEP, 1987).
- Hungerford and Volk's environmental behaviour model (1990) suggests that environmental sensitivity (defined as an empathetic perspective toward the environment) can be an important starting point in developing environmentally responsible behaviour.
- According to Bulkeley (2000), an individual's knowledge about their surroundings, combined with environmental sensitivity, is believed to influence how they respond to environmental challenges.

Box 2. Key competencies for sustainable development:

According to the NCERT learning outcomes at the elementary stage (2017), three key competencies need to be cultivated to enable individuals to act towards the vision of sustainable development:

- Awareness about immediate surroundings.
- Sensitivity towards our natural environment.
- Skills that enable us to think and act towards sustainable development.

A study on neighbourhood birds

We explored these questions through a pilot study on neighbourhood birds. Recognising the key role that adults can play in introducing children to the natural world with awareness and sensitivity, we invited a group of

resource persons from the Azim Premji Foundation to participate in this study. To keep things simple, participation in this study involved three steps:

- Select a location near your house or immediate neighbourhood.
- Visit this location for at least 15 minutes twice a week to look for birds. Use the photos in the Google form provided by us (**Birds in your Neighbourhood – Data collection sheet**) to identify any birds that you spot and learn their (common English and local) names. Record your observations (location, type of ecosystem, weather conditions, name of the bird, its behaviour, etc.) as accurately as possible and share with us through the form.
- Continue making these visits for at least a month. Observe and make note of any physical changes (tree logging, clearing of bushes, etc.) you notice at the location. Would these changes have any impact on the kinds and numbers of birds that you see there? Again, share

your thoughts with us through the Google form.

Overall, eleven people participated in this study and reported 43 bird species in fifteen habitats including roadside trees, vacant plots, canals, ponds, lakes, and the seacoast (see Fig. 1). The study lasted two months in the most exciting time of the year for birdwatchers (November and December) – allowing participants to observe both resident and migratory bird species. This led to more active involvement, although some participants did not stick to the schedule of two weekly observations as diligently as the others.

Reflections on the study

This study was designed to appreciate bird diversity, map bird habitats in the city, and improve people's knowledge of birds. Engaging in this study helped participants identify different bird species, hone their observation skills, and motivate them to share their



Fig. 1. Observation location map.

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Table I. Habitat-specific observations of bird species from a bird diversity study in Puducherry.

Habitat selected	Birds observed (common names)	Habitat selected	Birds observed (common names)	Habitat selected	Birds observed (common names)
Building	Blue Rock Pigeon Common Myna House Crow House Sparrow Jungle Crow	Vacant Plot	Oriental Magpie Robin Common Myna House Crow House Sparrow Purple Sunbird Red-vented Bulbul Rose-ringed Parakeet Jungle Crow Purple-rumped Sunbird Asian Palm Swift Blue Rock Pigeon Black-rumped Flameback Common Kingfisher Lesser Cormorant Little Egret White-breasted Waterhen Common Tailorbird Pied Cuckoo Red-wattled Lapwing Black Drongo Pond Heron Ashy Prinia Asian Koel (male & female) Black Kite Barn Owl Brahminy Kite Common Babbler Golden Oriole Greater Coucal Indian Robin Rufous Treepie Scaly-breasted Munia Spotted Dove Tri-coloured Munia White-breasted Kingfisher	Lake	Ashy Woodswallow Common Myna House Crow Blue-tailed Bee Eater Asian Palm Swift Pond Heron Rose-ringed Parakeet Grey Heron Lesser Cormorant Little Egret Greater Coucal Black-rumped Flameback Lesser Whistling Duck Red-wattled Lapwing Black Drongo Spotted Dove White-throated Kingfisher Grey-headed Swamphen Little Grebe Greater Egret
Agricultural field	Oriental Magpie Robin Common Myna House Crow House Sparrow Purple Sunbird Red-vented Bulbul Rose-ringed Parakeet				
Canal	Oriental Magpie Robin Common Myna House Crow House Sparrow Purple Sunbird Red-vented Bulbul Jungle Crow Pond Heron Purple-rumped Sunbird Asian Palm Swift Common Tailorbird White-breasted Waterhen	Pond	Asian Palm Swift Pond Heron Black Drongo Common Myna Grey Heron Gray-headed Swamphen Little Grebe Spotted Owllet Black-rumped Flameback Whistling Duck River Tern Little Egret Tri-coloured Munia Red-wattled Lapwing	Shrubs	Spotted Dove White-throated Kingfisher Asian Koel Jungle Crow Little Egret Blue Rock Pigeon Common Myna Golden Oriole Indian Robin Rose-ringed Parakeet Oriental Magpie Robin Spotted Owllet Black Drongo
Wetlands	Asian Palm Swift Common Myna Rose-ringed Parakeet Pond Heron House Crow White-breasted Waterhen Barn Swallow Black Drongo Black Kite Blue-tailed Bee Eater Black-rumped Flameback Common Kingfisher Lesser Cormorant Little Egret Pied Cuckoo Red-wattled Lapwing Jungle Crow			Street Avenues	Jungle Crow Common Tailorbird House Crow Common Myna House Sparrow Purple Sunbird Red-vented Bulbul White-browed Wagtail

enthusiasm and skills with others (see **Box 3**). It also seems to have helped participants connect birds to popular culture in the form of songs, movies, etc. This is reflected in some of the feedback we received from the participants (see **Box 4**).

In addition, observing birds in their habitats led some participants to look deeper into their relationship with their surroundings, asking questions such as – what brings birds to these places? How do we decide the richness of a location as a bird habitat? What does the habitat provide to us? What if these kinds of habitats disappear from our localities? For example, one participant (Swetha A, an Education Resource Person) observed white-breasted waterhens, house crows, and magpie robins at one of the locations she had selected for the study. On one visit, she noticed that the plants at this location had been cleared-up. This led her to ponder over questions like, “*What will happen to the birds residing there? Where will they go?*” Such experiences and concerns led to discussions on the diversity and behaviour of birds, the importance of a particular location as a bird habitat, and factors that influence the continued habitability of the location for birds (see **Table I**).

On the other hand, since the aim of the study was to observe birds and participation was voluntary, participants did not feel strongly obligated to follow the process we had suggested. This was our most important challenge.

Although the activity aroused curiosity in birds and their habitats, we feel that a sense of obligation may be necessary to ensure that participants develop a more long-term and committed learning engagement with the natural world.

Parting thoughts

The pilot study offered participants the opportunity to explore their relationship with the natural world by selecting a location in their own neighbourhood that they could visit on a regular basis. The process of looking for birds and observing them keenly for identifying features and behaviours helped many participants strengthen their observation skills and ability to recognise common bird species. Sharing systematic records of not just the birds but their habitats provoked some reflection on our interactions with and influence on the natural world. We believe that a longer duration study with more opportunities for observation, reflection, and discussion on birds and bird habitats as a whole, may help build on this early interest and awareness. Lastly, this study offered some participants the opportunity to draw out a personal hobby from an exercise in environmental education.

Based on our experiences from this study, we would now like to extend it to students (especially at the secondary level) and teachers. Our hope is that this study will not only help strengthen their observation skills but also help students and teachers develop

Box 3. Some highlights of participant observations:

- House crows and common mynas were the most spotted birds in all the different habitats selected by the participants.
- House crows and house sparrows were the most spotted birds in the street avenues.
- Red-wattled lapwings were spotted only by participants who chose lakes for their study.
- Asian palm swifts were spotted only near Velrampet lake, which may be related to the palm trees planted along its banks.
- Rose-ringed parakeets were the single most observed bird species in Murungapakkam – an urban space in Puducherry.
- A pond heron (a water bird) was observed perching on a neem tree at a location (Mudaliarpet) that did not have any water body in its vicinity.

Box 4. Feedback from participants:

“I am not a great observer at all. I thought participating in this study will help me to cultivate the habit of observing my surroundings on a regular basis. After the study, observation has become a common trait in me. I also learned the commonly seen birds in our surroundings through my peers.”

– Puviarasan Sivarajan, Education Resource Person, Azim Premji Foundation.

“The first time, when I saw the format of the data collection sheet, I was wonderstruck. Because it had so many birds, their names, along with their pictures. In fact, the Maanguil bird (Indian Golden Oriole) name is known very well due to the popular Tamil movie song. I first saw them as a pair at Kandamangalam. In an interaction with my friends, I was able to name a few birds that were flying around, which made them look up to me as a knowledgeable person in Ornithology.”

– Benedict Henry, People Functions, Azim Premji Foundation.

“Before coming to Pondy, I never observed birds or bothered to know their names. But now, I have a curiosity when I see birds, and I try to identify them by their names. I think I can make my family and friends build such an interest in birds by asking them to name birds or by sharing interesting facts about them. For example, the Drongo is a very cunning bird that imitates the sounds of other birds, animals, and even things such as camera click. Finding out the local names of birds and the reason behind those names, names of birds occurring in movie songs etc. are also ways to initiate conversations on birds and build an interest in birdwatching.”

– Vimal P Thomas, Education Resource Person, Azim Premji Foundation.

curiosity, awareness, and sensitivity for their natural environment. These are first steps towards developing the attitude, knowledge, and skills to address environmental problems and contributing to a sustainable future.

Key takeaways

- Bird watching can help strengthen observation skills, and build awareness and sensitivity towards the natural world in both adults and children.
- Developing a bird-watching routine that beginners can undertake by themselves can help them identify birds in their own neighbourhoods, notice bird habits and habitats, and appreciate bird diversity.
- Over time, bird watching can encourage participants to share their enthusiasm with others as well as reflect upon our influence and impact on the natural world.
- Observation skills, awareness, and sensitivity towards our natural environment are among the key competencies needed to address environmental problems and contribute to sustainable development.



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Note:

1. The 'Birds in your Neighbourhood – Data collection sheet' can be accessed here: <https://docs.google.com/forms/d/e/1FAIpQLSeWBVd102LM08xzrmthZKzCmNcfS4EIVykVcApFCcTZKSgVXw/viewform>.
2. Source of the image used in the background of the article title: Bird watching. Credits: Skitterphoto, Pixabay. URL: <https://pixabay.com/photos/bird-watching-binoculars-mountain-3635268/>. License: CC0.

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