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NEW RECORD OF BIRDS FROM KOLKATA METROPOLITAN AREA AND ITS ENVIRONS

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INTRODUCTION

The city of Kolkata is one of the important metropolises of India. Over the years this city has undergone an immense metamorphosis from being an area surrounded by marshes and jungles interspersed by human habitations, to a concrete jungle of the modern Kolkata. In the process it has lost a large part of its natural habitat mainly during the development of the human settlement in the area. Whatever greenery that could be found, within the city limits and its adjoining areas, at present are primarily attributed to the parks, gardens, orchards and roadside plantations.

The natural history of Kolkata and its surroundings have been a point of immense interest among naturalists since eighteenth century. The faunal lives of the region have been reviewed by a number of scientists, from time to time, during the past three centuries. In our present effort, we had undertaken a project to register the diversity of plants and animals that are available to us in the present day conditions. Emphasis was given to specific groups of flora and fauna, such as angiosperms among floral segment and Lepidoptera (butterflies mainly), Aves and Mammals in faunal part. The project was funded by University Grants Commission entitled "Urban Biodiversity Study in and around Calcutta" and the study was conducted between April, 2002 and March, 2005.

During our study we came across some new species of birds, which were recorded for the first time from Kolkata and its surroundings (20 km in the south, 18 km in the south-south-east, 10 km in the east, with Raj Bhaban, Kolkata). In this communication we would like to bring our findings to the notice of birders (the followers of avian biology) as we feel these records are of great

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interest as well as significant ones. These birds were recorded from seven of the seventeen sites we had selected for the project work, such as—Shyamkhola, Chintamani Kar Bird Sanctuary, IIMC, Joka, East Kolkata Wetlands (in part), Banobitan (Salt Lake City), Brace Bridge Wetlands and Tollygunge Club. The birds were identified in the field on the basis of description provided by Ali and Ripley (1986, 1987 & 1997) and Grimmett *et al.* (1999), while the common English and scientific names follow Manakadan and Pittie (2001). A couple of birds mentioned here (No. 9 and 10) were identified before the start of the project which were new records from Kolkata urban area.

Though the birds (no. 1-10) were sighted for the first time by the authors from the Kolkata urban area and the record, provided by them, was incorporated by Sri Kushal Mookherjee in his article—*Birds in and around Kolkata*—in Naturalist III published by Prakriti Samsad, 2004. The article, however, does not include a detailed note on the birds with regard to sighting and other relevant data; hence this note was prepared.

STUDY AREA

1. Shyamkhola (22°25.24' N – 88°23.32' E) :

This area to the west of Narendrapur, and almost adjoining it, in Dakshin Jagatdal, consists of villages with dense orchards, open croplands and ponds of different sizes. It also has recently formed wetlands created owing to removal of soil from croplands for brick fields. There are several old bamboo groves which attract many birds. When the trees are in flower or with fruit, many nectar eating birds and butterflies as well as fruit eating birds and even few mammals congregate, this is unique to this place. The small and medium sized ponds and a few large pools attract water birds. Trees are mostly old ones; palm and coconut trees are old and fairly tall.

2. Chintamani Kar Bird Sanctuary (Narendrapur Wildlife Sanctuary) (22°25.70' N – 88°24.15' E) :

This area in Narendrapur south of Kolkata, still has about 6.88 ha of fruit orchards with densely vegetated undergrowth, with the further ten acre encroached by human habitation. The area has groves of old mango *Mangifera indica* trees interspersed with other fruit bearing trees.

3. IIM-C, Joka (22°36.49' N – 88°23.02' E) :

The area studied is the compound and adjoining area of the Indian Institute of Management, Kolkata. The IIMC campus (54.63 ha area) has many wetlands and densely planted areas with good ground cover but lot of buildings are coming up, decreasing the area of vegetation. Some of the wetlands are leased out for intensive fishery. Still the *Typha* bed that remains helps several

birds and few mammals to take shelter. This unique *Typha* bed does not exist anywhere else in the city where we have conducted our biodiversity study. Behind the IIM, Joka campus, the area is also a marshy land where not only migratory ducks and storks forage and roost, but birds of prey also congregate there for hunting, at least in winter. New buildings which are coming up now, both inside and outside IIMC are interfering with the wild flora and fauna and these are depleting day by day.

4. East Kolkata Wetlands–Part (22°34.00' N – 88°26.09' E) :

The main area of what was the north Salt Lakes at present in the Nalban Bheri to south of and east of Nicco Park (Jhilmil). This bheri, owned by the Fisheries Department of the Government of West Bengal, has an area of 152 ha and, like all other bheries of the area, is a sewage-fed fish farm. The maximum depth of water is c. 1.6 m. The central part is devoid of any emergent vegetation and the fringe has water hyacinth stretches controlled by bamboo barrier. We generally concentrated on Teener Gheri, Charnumber Bheri, Sardar Bheri, Matar Bheri, Chintasingh Bheri and Munsir Bheri.

5. Banobitan (Salt Lake city) (22°35.38' B – 88°25.15' E) :

This is a sprawling park with lots of trees, some open areas, wetlands and manicured garden. Many tall trees are used by birds like Green Pigeon or Large Indian Parakeet or Indian Roller to nest. The garden being well maintained, it attracts a large number of butterflies. The Bottle Brush trees are the feeding ground of the Purple as well as the Purple-rumped Sunbird. The old trees attract Woodpeckers. The lake, although primarily meant for fishing, attract quite a few water birds. The south and the south-eastern part of the lake have water hyacinth. The eastern canal that connects the southern part of the lake has been choked with water hyacinth. To everybody's utter dismay, the southern periphery of the lake is used for washing clothes and for bathing which is likely to disturb the roosting as well as nesting of water birds. The nursery is well tended and location-wise remains undisturbed in the south-western border of the garden. Here the shy Ground Thrush has been seen to nest. Along the western periphery of the garden there is a large unused area where in the evening mammals like jackal are seen regularly. This land belongs to Kolkata Metropolitan Development Area and is now being cleared. This will affect the jackal and other mammals.

6. Brace Bridge Wetlands (22°31.24' N – 88°17.63' E) :

The marsh west of the Brace Bridge railway station is now a very changed environment from what it was twenty years back. The Mudiali Ecological Park or the Nature Park, as it is now known, is under intensive fish culture so most of the water body is devoid of any vegetation, either floating or emergent. There are embankments crisscrossing the whole area, which have dense plantation of trees. There is no shallow water habitats left which the waders used to visit. However,

the trees do attract many arboreal birds, which were not present in such numbers and variety in the past.

7. Tollygunge Club (22°29.44' N – 88°20.37' E) :

The 40.47 ha premises of the club in south Kolkata is an eighteen-hole golf course that has tree lined golfing fairways, groves of interesting trees and the club house. The undulating grassland (at places) is picturesque and *Lantana* bed here attracts many butterflies during flowering season. It has a resident pack of jackals (10-12 are often seen). Besides it harbours some small mammals like civets as well as several interesting bird species.

SYSTEMATIC ACCOUNT

Periodic studies were conducted in these above mentioned localities which have yielded some valuable information regarding the general bird life of these areas. During the course of the study we also came across some species of birds which were recorded for the first time from the city limits of Kolkata and its adjoining localities. They are—

1. *Butastur teesa* (Franklin, 1832)

White-eyed Buzzard

Butastur teesa (Franklin) (family : Accipitridae) is a resident bird, cosmopolitan in distribution, to be found throughout the subcontinent, though less common South of Madhya Pradesh (Ali and Ripley, 1987). As far as West Bengal is concerned, there are sporadic records of this bird from different areas of the State (Majumdar *et al.*, 1992). However, a White Eyed Buzzard had never been identified from the environs of Kolkata before we did it at Shyamkhola on 24 November, 2003. We found it resting on a coconut tree in the areas adjoining to an orchard at Shyamkhola. (A photograph by digital camera – DIGI-LINK Model SSC 350F – is enclosed).

2. *Hieraaetus pennatus* (Gmelin, 1788)

Booted Eagle

Hieraaetus pennatus (Gmelin) (family : Accipitridae) is a smallish eagle, with long wings and long square-ended tail. It has an overall brown coloured head-body in darker morph. The pale morph, however, is whitish in overall appearance. The tail in both morphs greyish on the underside, with darker at the centre and at the edge. The remiges are black with a pale wedge on the inner primaries (Grimmett *et al.*, 1999). In addition, the darker morph has characteristic white shoulder patches, pale median covert pannel and a pale crescent on the upper tail coverts. A bird belonging to this species was recorded, flying overhead, for the first time while conducting field survey at Indian Institute of Management, Joka on 17 January, 2004. This species is a regular winter migrant to India, and is found almost throughout the subcontinent from the Himalayas – c. 2400 m in the

north, through the Gangetic Plains to Deccan and Kanyakumari in the south (Ali and Ripley, 1987). However, booted eagle has not been recorded from the environs of Kolkata, prior to the record made during our study.

3. *Xenus cinereus* (Guldenstadt, 1774)

Terek Sandpiper

Though breeding grounds of *Xenus cinereus* (Guldenstadt) (family : Scolopacidae) extends from Finland to Lake Baikal, it winters in East Africa, Madagascar, Mauritius, Pakistan, Bangladesh, Burma, Malayan Archipelago, Australia and Tasmania (Ali and Ripley, 1987). This species is a common migratory wader to India that affects coastal and tidal areas. *Xenus cinereus* may be sighted occasionally in the inland water bodies at the time of migration to and from their wintering grounds. The Terek Sandpiper is a regular winter visitor to coasts of West Bengal too (Majumdar *et al.*, 1992). However, there were no previous sighting records of this bird from the environs of Kolkata till it was sighted during our field survey, on 29 February, 2004, at East Kolkata Wetlands. (A photograph by digital camera – DIGI-LINK Model SSC 350F – is enclosed).

4. *Calidris ferruginea* (Pontoppidan, 1813)

Curlew Sandpiper

Calidris ferruginea (Pontoppidan) (family : Scolopacidae) is a bird breeding in the Palaeartic Region and winters along the coastal belt of Indian Subcontinent, including that of West Bengal (Ali and Ripley, 1987; Ripley, 1961; Majumdar *et al.*, 1992). This species usually affects sea-shores, lake-shores and adjoining inland mudflats and agricultural fields. *Calidris ferruginea* was recorded for the first time from Kolkata and its adjoining areas on 01 May, 2003 at East Kolkata Wetlands. A second bird was observed from the same locality on 29 February, 2004. (A photograph by digital camera – DIGI-LINK Model SSCF – is enclosed).

5. *Cacomantis passerinus* (Vahl, 1797)

Indian Plaintive Cuckoo

An Indian Plaintive Cuckoo, *Cacomantis passerinus* (family : Cuculidae) is found throughout the subcontinent, affecting well-wooded environs. It has also been recorded from Nepal, Sikkim and Bhutan reaching an altitude *c.* 2700 m in the Himalayas (Ali and Ripley, 1987). There are no records of this bird from Western Rajasthan, Northern Gujarat and the Andaman and Nicobar Islands. Though an India Plaintive Cuckoo may be present in West Bengal, we do not have any document confirming this bird's occurrence. This may be attributed to the fact that the bird being very cryptic during the non-breeding season it is easy to overlook it during other seasons. We recorded this bird for the first time from Banobitan on 23 June, 2003. There are no earlier records of this bird from the environs of this city, and the bird that we had seen may have been a drifter, which probably fits well with their nomadic nature (Ali and Ripley, 1987).

6. *Pitta brachyura* (Linnaeus, 1766)**Indian Pitta**

Pitta brachyura (Linnaeus) (family : Pittidae) is a cosmopolitan bird and can be found almost throughout the subcontinent except the arid regions of Rajasthan (Ali and Ripley, 1987). Occasionally it may reach up to an altitude of 1700 m. Though Majumder *et al.*, (1992) said that this bird had been recorded from Darjeeling and Jalpaiguri districts of West Bengal, we would like to mention that an Indian Pitta is common seasonally throughout the state. The first record of this bird from the environs of Kolkata was made during our project survey at Shyamkhola on 12 May, 2002. This bird had probably halted here on its way during the summer migration.

7. *Phylloscopus occipitalis* (Blyth, 1845)**Western Crowned Warbler**

The breeding range of *Phylloscopus occipitalis* (Blyth) (family : Sylviinae) extends between subtropical dry and tropical forests of Pakistan, India and Nepal. But, this bird winters throughout the Peninsular India, having a preference for the hilly areas (Ripley, 1961). Though, eastern range of this bird may extend up to Bangladesh and Burma (occasionally) through UP, Bihar and West Bengal (Ali and Ripley, 1987; Majumder *et al.*, 1992), *Phylloscopus occipitalis* was never recorded from Kolkata and its surroundings till we observed one bird from of this species, hopping among branches of a Mango tree *Mangifera indica* in search of insects, about 5 to 6 meters from the ground, at Chintamani Kar Bird Sanctuary on 12 February, 2005.

8. *Muscicapa sibirica* Gmelin, 1789**Sooty Flycatcher**

The breeding range of *Muscicapa sibirica* Gmelin (family : Muscicapinae) extends from West Pakistan to Burma, through Safed Koh in NWFP, Chitral, Gilgit, Kashmir, Garhwal, Nepal, South-eastern Tibet, Sikkim, Darjeeling and Assam (Ripley, 1961). This is an altitudinal migrant that, usually shuttles between c. 2100 m–3300 m (timber line) and occasionally coming down to c. 1200 m (Ali and Ripley, 1987); optimum zone being 2400–3000 m (Ali & Ripley, 1996). In eastern India they are known to spend their winter in the Duars region and hilly tracts of Khasi Hills, Shillong and Cachar Hills and Manipur (Ripley, 1961; Ali and Ripley, 1987). Here it can be stated that there were no earlier instances which would suggest that this bird has been recorded from a locality like Kolkata that is situated so far down in the plains. We recorded one *Muscicapa sibirica* at Nature Park, Brace Bridge Wetlands on 25 February, 2004 and in March, 2005.

The bird was perched on a branch of *Caesalpinia pulcherima* Swartz, c. 30 feet from the ground. The bird displayed a curious behaviour as it got air borne to hawk on flying insects. It would leave its perch in search of prey, catch it with a looping flight and return to the branch, almost at the same spot from where it had taken off. This seems to be a characteristic of this

species, as our observations tally with the behaviour depicted by Ali and Ripley, 1987. As far as their migratory nature is concerned, it seems that *Muscicapa sibirica* is, primarily, a species that sticks to the northern and eastern hilly tracts of the country and the adjoining foothill areas. However, occasional stragglers may drift farther from their usual migratory hunts in quest of food and refuge during the winter months, as it seems to have occurred in case of the individual we had recorded at Brace Bridge. (A photograph by digital camera – DIGI-LINK Model SSC 350F – is enclosed).

9. *Tarsiger cyanurus* (Pallas, 1773)

Orange-flanked Bush-Robin

The bird, *T. cyanurus*, (family : Turdinae) inhabits the western Himalaya from Safed Koh, Swat and Gilgit to Garhwal; and is very common in Kashmir. It breeds between 3200 and 4600 m; winters between *c.* 2600 and 1200 m, occasionally down to *c.* 750 m. It affects undergrowth in open forest of oak, pine, fir, birch or rhododendron, and thickets of barberry, *Viburnum* etc. along edges of heavy forest. In winter frequently to be seen on road side wire fences in quiet wooded hill stations. Downward movement noted in September at 1800–2400 m but arrives at lower elevation (*c.* 1200) only in November (Ali and Ripley, 1997).

As a rule it is very shy and secretive. It hunts in shrubbery and low trees as well as on the ground catching insects while hopping about like a robin or by launching sorties in the air after them (Ali and Ripley, 1997). “Very fly-catcher like in its movement” (Stanford). As we were proceeding south along the east wall of Tollygunge Club grounds on the afternoon of 27 November, 1999 a tiny bird flew past and very quickly went into a bush. After scanning with binoculars we saw it was sitting on branch of a bush. After each sally it returned to its perch on the same bush. The bird was brown with pale white eye ring with sides of throat and abdomen grey brown the colour of which become lighter towards the mid-ventral line and the vent remaining brownish. White supercilium and triangular white patch on throat could be seen distinctly. Pale orange flanks could be seen while flying from one place to the other being disturbed by our presence. Leg looked deep brown or blackish. It was identified as Orange-flanked Bush Robin. Kolkata is not included in its area of distribution in the available literature on birds. (A photograph by digital camera – DIGI-LINK Model SSC 350F – is enclosed).

10. *Dicrurus remifer* (Temminck, 1823)

Lesser Racket-tailed Drongo

The distribution range of *Dicrurus remifer* (Temminck, 1823), the Lesser Racket-tailed Drongo (family Dicruridae), starts from the lower Himalayas from Garhwal eastward through Kumaon, Nepal, Sikkim, North Bengal (Darjeeling dist.), Bhutan and NEFA, Assam north and south of Brahmaputra River, Nagaland, Manipur, Mizoram. East Pakistan (hill tracts); from the edge of the

plains, through the foothills up to c. 2000 m. Affects heavy moist-deciduous and evergreen forest (Ali and Ripley, 1986). This bird was never reported from South Bengal. A loud metallic whistle from a very close distance in the Chintamani Kar Bird Sanctuary attracted us on the post-monsoon morning of 12 November, 1997 on our way back at around 10'clock. All of us focussed our binoculars towards the source of the whistle and to our utter surprise we found it to be a lesser racket-tailed drongo. We were thrilled and kept it within the view of our binoculars. It was sitting on a horizontal branch of a very old mango tree on the left side (from the entrance) of the main walk of the sanctuary. It was sitting at a height of around 3.5–4 meter from the ground amid fern fronds growing on the tree. It whistled once more, turned its back towards us and the squaretail was clearly visible confirming its identify. We could see the glossy metallic black drongo with two elongated outer tail-feathers ending in spatula-like rackets and square tail. Initially we could only see the elongated tail-feathers and not the square tail. The conspicuous backward-curving tuft or crest on forehead was missing in this bird eliminating the possibility of its being a Greater Racket-tailed Drongo. This lone *Dicrurus remifer* was subsequently spotted by our fellow birders three-four times from the same sanctuary in that particular season.

SUMMARY

The bird diversity study within Kolkata Metropolitan area has generated a comprehensive baseline data, which may help future assessment of biodiversity and any impact on the habitat of the urban Kolkata. The avifauna of Kolkata included 292 species up to 1992 (ZSI records). Compared to this we recorded fewer number of birds (2002-2005). The present study revealed at least 10 new records of birds from the Kolkata Metropolitan area. The habitat which is generally free of anthropomorphic disturbances was found to harbour the species that were new to Kolkata Metropolitan area. Some of them are not only new to Kolkata but also to south Bengal. However, drastic change in land use pattern associated with urbanization of Kolkata or of such areas may result in significant impact on the bird life of the area.

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