SHORT COMMUNICATION

Biodiversity of Avifauna in Mumbri Creek of South Konkan, Deogad Taluka, Maharashtra

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ABSTRACT

The present investigation was carried out in Mumbri Creek of Sindhudurg district (Lat. 16º 21' N. Long. 73º 25' E). The main aim of this work is to find out the productivity of the sand creek. The mangroves consist of various types of animals. Many species of birds have disappeared all over the world due to deforestation, human interference in hilly regions, quarrying in forest and pollution. Human interference in the jungle for various purposes create disturbance in the habitat of birds, hence, neither they feed properly nor can construct their nests safely. The wetland ecosystem plays an important role in conservation of birds. Thus, the wetlands serve as treasure house for the ornithologists and interested. During high tide, the birds remain on the mangrove plants, while during low tide they come down and feed on the ground or in air on varieties of insects. The mangrove swamps provide readymade food, therefore naturally, the birds stay there and during breeding season they make their nest amongst the plants where the enemies cannot reach, provided if no human interference happens. One of the other important roles that mangrove plays is that it acts as the habitat for many species of birds. Although mangroves at first glance appears to be barren and unprotected place for any animal to live in, this is precisely the aspect that many of the bird species take the advantage as it is marshy and saline area where animals do not venture. Quietness and silence are so tangible in fully developed mangrove forests, that one can hear the puff of methane bubbles coming up from the bottom as they break the surface of water. Even water itself is silent in its streamlined flow up and down with the tides. Who is not going to stay in such calm, peaceful, vibrant, rich and academic environment? Hence the birds have an undisturbed environment at their disposal, for resting, breeding, nesting and also feeding.

The avifauna includes resident, local migrant and migratory. The mangroves are very important for the birds as ample of food is available to these birds and mangroves are nesting sites for these birds. The present investigation was carried in 2015.

Key words: Birds, Animals, Mumbri creek, Mangroves.

INTRODUCTION

The mumbri creek is associated with thick belt of different species of mangroves spread in muddy ground. Due to muddy grounds there is no interference of any animals, hence, attracts variety of birds for various purposes. Thick forest of mangrove swamps is associated with variety of faunal species, which serve as food for many birds. Ali and Ripley (1983). The species like *Rhizophora* has beautiful flowers containing honey; therefore many birds reside in their vicinity Yeragi and Yeragi (2005).

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Since the tidal influx and recede creates a marshy ground, many insects, marine animals, mud borers and also some fishes, which may be accidently carried in due to tidal influx, are found in this zone. This attracts many aquatic feeding birds. During low tides, many birds freely walk on the mud flats of mangroves for their active feeding. Yeragi and Yeragi (2006).

MATERIALS AND METHODS

Morning as well as evening continuous observation with eyes as well as with binoculars.

RESULTS AND DISCUSSION

The taxonomic list of the avifauna recorded during the study period Sept. 2014 to Sept. 2015 is given in Table 1. The check list may show variant from time to time due to drastic change in environmental conditions. The observation was recorded for three seasons.

Table 1: check list of birds in and around wetlands of mumbri creek.

Sr. No.	Name of birds	Common name	Status
1	*Accipeter nisus* (Linn.)	Sparrow Hawk	M
2	*Alcedo atthis* (Linn.)	Common Kingfisher	RM
3	*Ardea cinerea* (Linn.)	Grey Heron	RM
4	*Ardea purpurea* (Linn.)	Purple Heron	RM
5	*Ardeola grayii* (Skyes)	Pond Heron	R
6	*Babulcus ibis* (Linn.)	Cattle egret	RM
7	*Ceryle rudis* (Linn.)	Lesser pied Kingfisher	R
8	*Coracina melanoptera* (Rupp)	Black headed Cuckoo	RM
9	*Corvus macrohynchos* (Wayter)	Jungle Crow	R
10	*Corvus splendens* (Viellot)	House Crow	R
11	*Egreta intermedia* (Wagles)	Smaller Crow	RM
12	*Eudynamys scolopacea* (Linn.)	Koel	R
13	*Gyps bengalensis* (Gmelin)	White Beaked Vulture	R
14	*Halcyon smyransis* (Linn.)	White breasted Kingfisher	R
15	*Haliaastue indus* (Buddaert)	Brahminy Kite	R
16	*Larus brunnicephalus* (Jerdon)	Brown headed Gull	RM
17	*Motacilla cinerea* (Tupstall)	Grey Wagtail	M
18	*Nycticorax nycticorax* (Linn.)	Night Heron	R
19	*Orthotomus sutorius* (Pennant)	Taylor Bird	R
20	*Pycnonotus cafer* (Linn.)	Red vented Bulbul	R
21	*Saxicoloides fulicata* (Linn.)	Indian Robin	R
22	*Parus major* (Linn.)	Grey tit	R

Table 2: Percentage composition of types of birds in relation to seasons.

Sr. No.	Season	Resident, Local Migrant RM%	Resident and Migratory predators R%	True Migrants M%
1	Pre-monsoon	31.09	51.14	15.24
2	Monsoon	35.82	44.37	12.93
3	Post-Monsoon	38.91	46.89	5.98

Birds represented by 22 species in mumbri creek for the period of twelve months. This shows that there was significant species diversity in the avifauna of mangroves. It is also noticed that there were three categories of birds like Resident and Local Migrant (RM), Resident and migratory (R) and Migratory (M). The percentage composition of the categories (Table 2 & Fig. 1) clearly indicate that the population of resident with migratory was high (51.14%) and lowest vagrant (2.53%) during pre-monsoon. This clearly shows that the mangrove ecosystem is quiet and silent with varieties of food items; make the migrant to stay for longer periods. The resident migratory birds were observed to move from one patch of mangrove to the other on the basis of selectivity of food. The true migrant birds' percentage was noted at third rank because these birds show migration only for short time basis and then they leave the place. Resident with migratory birds remained for longer time and laid their eggs in the mangrove belts. migratory birds are also noted during journey resulting in second peak in February till sometimes also upto May.

The largest and the most diverse group of birds inhabiting in the area was of the arboreal birds. These belonged to different ecological background but their utilization of mangrove ecosystem was remarkably similar Samant (1985). The same observation is related to the present investigation of mumbri creek mangrove habitats. These birds used the habitat provided by the mangrove canopy. Many birds like cattle egret use trunk, branches and pneumatophores as the nesting sites, significant influence of the terrestrial bird species on the avifauna of the mangrove ecosystem around mumbri creek. It was also noticed that proximity of open areas increased likelihood of birds of prey.

Mangrove wood cutting, which is prevented in the other areas, affects bird population by depriving them of their resting and roosting habitat. Bacon (1970). In mumbri creek mangrove, there is no human interference hence no disturbances to the bird population. The first peak of bird population in October corresponds with the arrival of migrants in the area and the decline noted in December is due to departure of many birds species as monsoon habitats start depleting, however the second influx of the

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