

Full Length Research Paper

Breeding birds in Saidpur cantonment area, Bangladesh

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Breeding status of birds in Bangladesh is more remarkable than that in other countries. Most of the resident birds breed here in the month of May, June and July. Because during these months all the insects lay eggs and finally these eggs are hatched into larva. So, in order to collect these larvae the birds lay eggs in their nests. Some birds like pigeon, dove, sparrow, babbler etc can lay eggs throughout the year. Maximum type of birds nest is twig or cup nest due to huge number of branch of the trees. There are some birds which build their nests with excellent or brilliant skill and some lay eggs in the tree holes. According to this research work minimum number of eggs' laying is two and maximum is eight. Incubation period of the eggs depends on the egg size or the total components within the egg. Lowest hatching period is ten days with shrike and white eye and highest with cormorant and with adjutant, it is twenty nine days.

Keywords: Birds of Bangladesh, breeding, eggs, nest.

INTRODUCTION

It is possible to build bird population of a particular species varies environmental factors such as weather, in order to distinguish natural fluctuations by the action of man. Breeding Birds Survey BBS. Low human disturbance is a great criterion for conserving huge breeding birds in a particular area. During the study of birds' breeding setting a level of coverage was important. Discouraged birds count at the time of heavy rain, strong wind and poor of visibility. Urbanization and industrialization is a problem for destroying trees which is main shelter for each bird Gregory et al., 2004. Largest target of territory mapping of birds in Europe early 1960s by Marchant et al., 1990. It has proved that highly valuable in advancing our knowledge and understanding the population of fluctuations among British birds O'Connor and Shrubbs 1986; Marchant et al., 1990; Baillie 1990; Greenwood and Baillie 1991; Peach et al., 1991; Fuller et al., 1995; Greenwood et al., 1995. However, timing of breeding had no effects on either clutch or egg size. High nesting densities allowed by habitat structure may be beneficial of reduced predation Garcia et al., 2008. Murton and Clarke 1968 found the pattern in England with the Spring and Summer periods accounting

for 60% of the total annual breeding. The actual criteria for the breeding of birds, the wildlife sanctuary is important where it can pass their total breeding life from egg to maturity. Some resident birds are caught by human beings during formation of their nests. Ultimately these birds cannot lay eggs in their nests or though they lay eggs, it cannot hatch for the activity of the people. So, we can say that without the suitable environment birds cannot show their breeding. There is some pronounced breeding observed in some area in Bangladesh. Otherwise the research on birds breeding is limited. Maximum observations have been completed depending on specific birds. Breeding biology of birds like types of nests, number of eggs, hatching period, all these are so tough for observation. Besides research works depend on much more manpower, scientific instruments and so on. Already several steps have been taken for the conservation of birds through plantation programme. So, the numbers of birds have increased.

Vegetation

Among all trees in Bangladesh, most of them are of

Table 1. Breeding birds are showing at a glance

Birds	Breeding season	Nest types	Clutch size	Colour of eggs	Parental care	Incubation	Fledging
Common Myna <i>Acridotherus tristis</i> , Linnaeus	Apr-Aug	Twig nest	4-5	Bluish	Both	13-15	18-20
Gray-headed Myna <i>Sturnus malabaricus</i> (Gmelin)	Mar-Jun	Twig nest	3-5	Bluish	Both		
Indian Pied Myna <i>Sturnus contra</i> , Linnaeus	Mar-Sep	Twig nest	4-5	Bluish	Both		
Magpie Robin <i>Copsychus saularis</i> , Linnaeus	Apr-Jul	Hole nest	3-5	Pale blue green, blotched and mottled with reddish brown	Female, male share other domestic chores	14-16	14-15
Common Babbler <i>Turdoides caudatus</i> (Dumont)	Between March and July but irregularly over the entire year	Hole nest	2-4	Blue	Both	13-15	10-12
House Crow <i>Corvus splendens</i> , Vieillot	Apr-Jun	Twig nest	4-6	Light blue	Female	18-21	52-57
Indian Tree Pie <i>Dendrocitta vagabunda</i> (Latham)	Feb-Jul	Twig nest	4-5	Pale white splashed and streaked with bright reddish brown	Both		
Black Drongo <i>Dicrurus adsimilis</i> (Hodgson)	Apr-Aug	Cup nest	3-5	White	Both	15-18	14-16
Rufous-backed Shrike <i>Lanius schach</i> (Hodgson)	Feb-Jul	Cup nest	3-6	Greenish white with purple-brown spotted	Both	10-12	14-15
Baya <i>Pleceus philippinus</i> (Linnaeus)	May-Sep	Pendant nest	2-4	Pure white	Male	14-15	15-17
House Sparrow <i>Passer domesticus</i> , Jardine and Selby	All year	Hole nest	3-5	Pale greenish white, stippled and blotched with brown	Both	14	11-23
Spotted Dove <i>Streptopelia chinensis</i> (Temminck)	All year	Twig nest	1-2	White	both	12-16	12-13

Table 1. Continue

Common Cuckoo <i>Cuculus Vahl</i>	Hawk <i>varius,</i>	Mid Mar-Aug	Parasitic bird, lays egg in twig nest	2	Light blue	By foster parents		
Small Barbet <i>Megalaima haemacephala</i> (Latham)	Green	Jan-Jun	Hole nest	2-3	White	Both	13-15	10-13

medium sized trees. In Chittagong Hill Tracts most of the trees are high. Besides in our villages there are much more bamboo bushes or grass like vegetation. The bank of the aquatic resources the bushes or trees are the source for birds' nests and shelter. Palm like trees are not few in Bangladesh. Sent Martin inland is full of coconut trees and these are suitable for the hole nest birds for breeding. Fig tree is found most in our locality and it is important for breeding of tailor bird. Evergreen forest in Sunderans, Chittagong, Rangpur and Dinajpur that are full of many birds and are important for their making nests and source of insect eggs and larvae that are used as food for birds.

MATERIALS AND METHODS

All the observations on birds like their breeding season, types of nests, number of eggs, egg colour and hatching period were completed skillfully. The breeding season on birds were observed by using video camera, placed it on the trees day by day. For the identification of the nest types and the height from the frond the nest materials were collected from the nest and appointed some manpower for this purpose. Some photographs were snapped with the high powerful zoom camera that helped for the identification of the nest types. Number of eggs and colours were identified with the help of climbing on the tree. Finally in order to observe the hatching period from the egg laying to the actual time the eggs were hatched have been considered. In case of nocturnal bird like nightjar, the torch light and video camera were used. From above all the observations were completed by high quality binoculars (8x50mm). Birds were identified by the using of some standard guide books on birds (Ali, 1941; Husain, 1974; Ali and Ripley, 1996). The classification of birds was completed according to Salim Ali (Ali, 1941).

RESULTS

The numbers of resident birds in Bangladesh are not poor or their reproductions are going on well. Due to abundance of fruit trees and forest trees, at present, the number of birds is increasing. Many birds are continuing

their breeding because of taking ripe fruits. The number of birds is increasing because of the presence of some valuable trees like mango, jackfruit and litchi. Most of the birds are making twig nests with the little branches of trees scattered around the habitat. As Bangladesh is the land of rivers, many sand pits are created by the bank of the rivers. Myna and bee-eater make their nests in those pits. The nests of many birds are also found in various botanical gardens or in the yards of the house. During the month of May, June and July most of the birds lay eggs in their nests because of availability of insect eggs and larvae. As a result their young survive eating these huge number of insects and thus save our crops from pest. The eggs take white colour because the harmful ray of the sun cannot enter into the hole and the eggs in the open place take different colours. The birds which lay fewer eggs are of the same sex ratio. Similarly, the birds which lay more eggs are of the different sex ratio. As the Cantonment area is protected and the common public activity are not available here so all birds are complete their biological activities easily. About 34% birds were in breed here. So this is good sign for the increasing of birds. As only female crow incubates the egg which is a common corvid habit by Goodwin 1976.

DISCUSSION

As our forest going to be extinct, but the present status of birds in Bangladesh are not bad. Moreover it can be said that most of these birds are breeding here successfully. But for having few numbers of high trees some birds like eagle, vulture, falcon, and accipiter cannot breed. Of the total birds of Bangladesh included all families most of the birds in the order Passeriformes. On the other hand the reproduction in the order ciconiiformes is in second position. Old aged banyan and fig tree are the source for their breeding. Besides, Bangladesh is a temperate zone so all birds feels well here. At present, in Bangladesh, the IPM technique or biological control is applying for the protection of crops from insect so the use of insecticide is limited. Less use of insecticide is not harmful for the nature. So, ultimately the number of birds is increasing. Awareness has increased in human beings for their

existence or protection of the nature. That is why they are taking some steps for their next generation to stay in this world.

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