NOTES ON THE USEFUL FEEDING ACTIVITIES OF BIRDS IN FIELD AREAS OF LYALLPUR

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The feeding activities of some birds in field areas of Lyallpur that were found innimical to insect populations have been mentioned in this paper, and suitable ways to encourage and improve these activities have been suggested.

For an agricultural country like ours, the study of birds affecting its croplands is of immense significance, Many species of birds devour and destroy large number of insects, insect larvae and eggs annually and thus make possible a profitable agriculture (Godard 1917). Hence, a country whose economy is based on agriculture can hardly afford to neglect the study of its avifauna that affects its croplands. In our country, the study of agricultural role of birds has been studied by Hussain and Bhalla (1931, 1937 a, b). The present paper deals with insect-eating activities of birds and suggests ways to encourage them. Moreover, it provides basis for further research in the field.

MATERIALS AND METHODS

Thirteen field trips, involving a total of 52 man hours, were undertaken at irregular intervals into the field areas in and around Lyallpur city during the year 1971. To facilitate identification of birds and their insect food, 12x field glasses were used.

RESULTS

The useful feeding activities noted with respect to each of the bird species, seen in field areas, is given below. The day and month of an observation that pertained to one particular date has been given at the end of it. As regard food insects, it was not possible to identify all the insects that the birds ate. In the following description only those insects have been mentioned about whose identity the author was positive.

Spotted Owlet (Athene brama)

Seen several individuals flying in the air, some perched on telegraph wire just after sunset. One evening (it had rained during the day), some of them were seen hunting winged termites during flight (8 July).

Alpine Swift (Apus melba)

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Seen flocks comprising of 20—500 individuals, sitting on telegraph wire from where they made solitary attacks on flying insects and returned to their place on the wire.

Green Bee-eater (Merops orientalis)

Seen solitary individuals or in twos, sometimes in groups of 8—10, sitting on telegraph wire or on exposed perches in fields from where they flew upon insects in the air and then returded to their perching site. Dragonflies and moths were identified in their beaks. One individual was seen holding a honey-bee in its beaks (19 July).

Indian Roller (Coracias benghalensis)

Seen solitery individuals, sitting on telegraph wire or on trees growing in fields. From several observations it was apparent that the bird had the habit of sitting long on its perch till some insect came into sight when it flew to secure it. The bird was never seen holding its prey in the beak; it swallowed it alive at once. However, it was seen swooping down on locusts in the air.

Hoopoe (Upupa epops)

Seen solitary individuals in fallow lands and untilled fields, often moving fast in straight line while probing the ground with their long beak; one individual was seen to cover a distance of 24 feet in one minute (4 April). Chrotogonous and beetles were identified in their beaks. They were also seen to relish ants; an individual picked up ants with high frequency as the latter came out of their hole (27 August).

Bay-backed Shrike (Lanius vittatus)

Seen it perched on telegraph wire, tree-tops or on haypiles from where they flew to catch insects on ground. An individual was seen adopting a peculiar mode of killing its prey (4 April); it caught a caterpillar, pressed it onto a thorn of a nearby bush and when it was killed the bird swallowed it.

Rufous-backed Shrike (Lanius schach)

This shrike was found as more common than the Bay-backed Shrike. Its habits were found to be similar to those of the Bay-backed Shrike. It was also seen feeding on caterpillars and chrotogonous.

Black Drongo (Dicrurus macrocercus)

Seen it perched mostly on telegraph wire, upright twigs and bushes in fields. It appeared that it used these perching sites as vantage points, from where it kept watch on insects. The moment some insect came into sight, it swooped down on it and later returned to the same perching site. It secured

its prey both in the air and on ground. An individual was seen nobbing a Common Myna of its prey which the latter held in its beak (17 June). Frequently, it was seen sitting on the back of cattle and catching insects disturbed by the animal's feet. In some freshly ploughed fields, it was seen alongwith many other birds making a good meal of such insects as grubs, maggots and black ants. It was also seen mobbing the House Crows, which, according to Ali and Abdullah (1936) was a great robber of the eggs and young of other birds. Evidently, this was a useful activity on the part of this bird. Probably, for its anti-crow disposition, such meek birds as the Common Mynas and Doves were seen to remain in close proximity to this bird.

Common Starling (Sturnus vulgaris)

Seen it in flocks in winter months, eating chrotogonous, locusts and Spiders from cultivated fields, and waste grains, grubs and maggots from fallow lands. In the month of March, small parties of 10-20 individuals were seen eating gram caterpillars from gram fields. People with shot-guns and fire-guns in hand were seen going around to hunt this bird.

Common Myna (Acridotheres tristis)

True to its name, it was found as a very common bird, one to many individuals were seen in almost every fields. It was particularly attracted to fields where ploughing operations were afoot, seen feeding on beetles and ants.

Bank Myna (Acridotheres ginginianus)

It was found to be much less common than the Common Myna. They attended the ploughing operations alongwith the Common Mynas, eating beetles and ants.

House Crow (Corvus splendens)

Two birds seen chasing chrotogonous in untilled fields, also observed some of them hunting winged termites after rains.

Red-vented Bulbul (Pycnonotus cafer)

Seen perched mostly on telegraph wire, trees and bushes in fields chasing insects in air in the manner of a Flycatcher. After a shower, some individuals of this bird seen hopping about on ground and eating black ants as these came out of their holes (20 August).

Common Babbler (Turdoides caudatus)

Seen solitary individuals as also groups of up to twelve birds, mostly near sugarcane fields, kicking dry leaves sideways to search for insects like ants and beetles on ground.

Jungle Babbler (Turdoides striatus)

Seen solitary individuals as also groups, of upto twenty individuals, mostly near sugarcane fields, eating ants and beetles.

Pied Bushchat (Saxicola caprata)

Seen solitary individuals or pairs, perched on bushes or small trees in and around fields, making short-distance sorties on insects in the air.

Indian Robin (Saxicoloides fulicata)

Seen solitary individuals or pairs, mostly on ground near sugarcane fields; sometimes perched on small bushes. Seen feeding on ants and beetles.

White Wagtail (Motacilla alba)

Seen solitary individuals as also small parties of 3—10 individuals, in fallow lands, feeding on small insects like ants and beetles. A large flock of the White Wagtails consisting of 300-400 individual seen in a ploughed field near s in-set (4—April).

House sparrows (Passer domesticus)

Large populations of this bird were observed in the fields. A flock of 50-70 birds was seen in a gram field, eating gram caterpillars. (4 April).

DISCUSSION

An insect-eating bird species is a potential friend of the farmer and it can yield practical benefits in agriculture provided it is present in sufficient numbers in the fields. As is apparent from the present study, there exist quite a number of insect-eating bird species in our croplands but it is sad that their numbers are very small. Even a casual visit to the field areas will indicate that except for the Common Mynas, which are, of course, present in appreciable numbers, the populations of other insectivorous birds are woefully limited; this situation accounts very well for the heavy losses of our crops due to insects. The reason for the small populations of insectivorous species is likely to be sought in the high numbers of other not-too-beneficial birds like the House Crows, House Sparrows and Parakeets. Although, the House Crows were seen eating insect-fare during the present study, their insect-eating habit was not a regular one and they could not be regarded as beneficial birds from agricultural view-point (Fletcher, 1923). Similarly, insect-eating by the House Sparrows was also not regarded as a regular activity of these birds (Stewart, 1969). Some authors had branded the House Crows and House Sparrows as "Scums of the air" (Ali and Abdullah, 1936).

In view of the not-much-useful role of these birds, their highly-built populations in field areas is not justifiable. And, when we realize that the huge numbers of these birds exert an inhibitory influence on the population-growth of truly insectivorous species, it appears all the more imperative to control and limit their numbers. Hence, suitable ways must be devised to bring down the high-soaring populations of the House Crows and Honse Sparrows so as to give insectivorous species a fair chance to flourisn.

A most common habit of insectivorous birds, noted during the course of the present study is that they require a suitable observation post from where they can watch insects and attack them. These observation posts are available to them in the form of telegraph wire, passing over the croplands, and bushes/small trees, growing in and around the fields. Telegraph wire may be considered as an asset to the farmers, since it is seen to provide perching sites to many of the insectivorous birds like the Alpine Swift, Green Bee-eater, Indian Roller and Black Drongo etc. It is, therefore, logical to assume that such field areas as are without any telegraph wire are likely to attract a lesser number of birds. The farmers of such areas will do well if they erect artificial wire around their fields. This they can accomplish by fixing two poles or bambeo sticks one at each of the two opposite edges of a field and passing a wire or a cord between them. As for the bushes and trees, it is really useful to have them in and around fields as many birds perch on them to carry out their attack on insects. The farmers should, therefore, not only retain bushes and small solitary trees in fields where they are already present but also plant them in areas where they are wanting. Alternatively, they may fix a number of upright twigs or slods in their fields as they also can provide the birds with coigns of vantage.

In the end, it may be emphasised that if the populations of the House Sparrows, House Crows and Parakeets are suitably controlled, and ample perching sites are provided to the insectivorous species, then, as a sequel to increased feeding niches, the prospects of a profitable agriculture will brighten up.

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