Vol. XVII (1-2). 1980

BIRDS OF THE UNIVERSITY CAMPUS (FAISALABAD) AND THEIR ECONOMIC SIGNIFICANCE

Mirza Azhar Beg and Junaid Iqbal Qureshi*

A total of sixty six bird species was recorded from the Campus of the University of Agriculture, Faisalabad. Some information about their food habits and abundance has been provided and their economic significance discussed.

INTRODUCTION

The University campus is located in the north-west quadrant of Faisalabad city and covers an area of about 1100 acres. A major portion of the campus land is under experimental crops of wheat, maize, cotton, sugarcane, fodders vegetables etc. and the rest is under orchards, gardens, lawns, playgrounds, and academic and residential buildings. The environs of the academic and residential buildings and roadsides are characterised by the presence of a variety of trees, shrubs, hedges and ornamental plants. Understandably, the campus is a sort of heterogeneous habitat with a well pronounced edge effect. As edge formation favours faunal variety, the avifauna of the campus is accordingly rich and varied.

MATERIALS AND METHODS

Field observations on the birds of the University campus were casually made from January, 1970 through February, 1973. The birds were identified with the help of 7x field glasses and notes on their food habits and abundance were taken. For identification of species and supplementing our observations on their food habits, we consulted Salim Ali (1972), Salim Ali and Ripley (1968–1974) and Hussain and Bhalla (1937). The residential status of individual species was decided on the basis of field observations made during this study as well as previous studies by the present workers on birds of Faisalabad District and vicinity (Beg and Qureshi, 1973, 1974). For determining the level of abundance of each individual species, such common birds as the House Sparrow (abundant), Little Brown Dove (common), Indian Roller (not common) and Jungle Crow (rare) were used as standards.

* Department of Zoology, University of Agriculture, Faisalabad

RESULTS AND DISCUSSION

A total of 66 species of birds (40 resident, 6 summer, 20 winter visitors) was recorded. Of these, 33 species were primarily insectivorous. With the exception of the Green Bee-eater, which largely feeds on honey bees, these birds seemingly play an important role in inhibiting insect populations. The birds of prey such as the Shikra, Pale Harrier, Spotted Owlet and Horned Owl are important in regulating the populations of small birds and mammals. The Horned Owl is nocturnal in habit and largely feeds on field rats. An examination of its pellets revealed that it consumed mole rat, soft-furred rat, mice and Indian gerbile.

A good many birds, listed in Table 1, have wide feeding niches. At first sight they seem to interfere with the farmers' efforts to get maximum produce yet we believe that a careful analysis of their food habits will drop many from the list of harmful species. Such granivorous species as the Doves and Rock-pigeons feed largely on grains and seeds of wild plants. However, during the sowing period their food habit is in direct conflict with man's interest. The Koel, Pied Crested Cuckoo, Barbet, Golden Oriole and Rosy Pastor mainly feed on fruits and berries of wild plants and on insects and, as such, may be regarded as neutral species. The food habits of the Large Indian Parakeet, Indian Treepie and Jungle Crow are such as entitle them to harmful status. But, because of their exceedingly small numbers and little dependence on orchard fruits and food grains, their pestilential activities are negligible. Howevere, the food habits of the Babblers need to be investigated before declaring them as useful or harmful species. The Myna causes some damage to orchard fruits. But, in view of the service it renders to agriculture by consuming large numbers of insects, particularly those flushed out by grazing animals and during ploughing operations, the Mynas can safely be regarded as useful to the farmer. The Red Vented Bulbul which is present in large numbers and damages guavas and dates is also an insect-eater. Hence, its economic status can be ascertained only after a careful study of its food habits. The Rose-ringed Parakeet and House Sparrows are decidedly the most harmful birds. The former has the notorious habit of eating less and destroying more. Like the house crow, they have community roosts on the campus. They roost and nest in groves of large and old trees with hollows in their stems and branches. This habit can be exploited to control these birds. Many times the parakeets were seen engaged in competitive fights over the possession of tree holes as well as mates. It is presumed that a good segment of the population does not breed due to

Table 1. *A list of birds recorded from the campus of the University of Agriculture, Faisalabad.* (Abbreviations: Rt, resident; SV, summer visitor; WV, winter visitor; C, granivorous; F, frugivorous; I, insectivorous; C, carnivorous; A, abundant; Cn, common NC, not common; Re, rare)

Species	Status			Food			Abundance				
	Rt	SV	WV	C	F	I	C	A	Cn	NC	Re
Shikra, *Accipiter badius*	x	.	.	.	.	x	x	.	.	.	x
Pale Harrier, *Circus macrourus*	x	.	.	.	.	x	x	.	.	.	x
Grey Patridge, *Francolinus pondicerianus*	x	.	.	x	x	x	.	.	.	.	x
Blue Rock Pigeon, *Columba livia*	x	.	.	x	.	.	.	.	.	x	.
Red Turtle Dove, *Streptopelia tranquebarica*	.	.	x	x	.	.	.	.	.	x	.
Collared Dove, *S. decaocta*	x	.	.	x	.	.	.	.	.	x	.
Little Brown Dove, *S. senegalensis*	x	.	.	x	.	.	.	.	x	.	.
Rose-ringed Parakeet, *Psittacula krameri*	x	.	.	x	x	.	.	x	.	.	.
Large Indian Parakeet, *P. eupatria*	x	.	.	.	x	.	.	.	.	x	.
Koel, *Eudynamys scolopacea*	.	x	.	.	x	x	.	.	.	x	.
Pied Crested Cuckoo, *Clamator jacobinus*	.	x	.	.	x	x	.	.	.	.	x
Barn Owl, *Tyto alba*	x	.	.	.	.	.	x	.	.	.	x
Spotted Owlet, *Athene brama*	x	.	.	.	.	x	x	.	x	.	.
Alpine Swift, *Apus melba*	.	.	x	.	.	x	.	.	.	x	.
House Swift, *A. affinis*	x	.	.	.	.	x	.	.	x	.	.
White-breasted Kingfisher, *Halcyon smyrnensis*	x	.	.	.	.	.	x	.	.	x	.
Green Bee-eater, *Merops orientalis*	x	.	.	.	.	x	.	.	x	.	.
Blue-tailed Bee-eater, *M. philippinus*	.	.	.	.	.	x	.	.	x	.	x
Indian Roller, *Coracias benghalensis*	x	.	.	.	.	.	.	.	.	x	.

Hoopoe, *Upupa epops*	x	.	.	.	.	x	.	.	x	.	.
Barbet, *Megalaima haemacephala*	x	.	.	.	x	.	.	.	x	.	.
Wryneck, *Jynx torquilla*	.	.	x	.	.	x	.	.	.	.	x
Pygmy Woodpecker, *Dendrocopos nanus*	x	.	.	.	.	x	.	.	.	.	x
Golden-backed Woodpecker, *Dinopium benghalense*	x	.	.	.	.	x	.	.	.	x	.
Pied Woodpecker, *Dendrocopos mahrattensis*	x	.	.	.	.	x	.	.	.	x	.
Crag Martin, *Hirundo rupestris*	.	.	x	.	.	x	.	.	.	x	.
Swallow, *H. rustica*	.	.	x	.	.	x	.	.	x	.	.
Wire-tailed Swallow, *H. smithii*	.	.	x	.	.	x	.	.	.	.	x
Bay-backed Shrike, *Lanius vittatus*	x	.	.	.	.	x	.	.	x	.	.
Grey Shrike, *L. excubitor*	x	.	.	.	.	x	.	.	.	.	x
Rufous-backed shrike, *L. schach*	.	.	x	.	.	x	.	.	.	x	.
Golden Oriole, *Oriolus oriolus*	.	x	.	.	x	x	.	.	.	x	.
Rosy pastor, *Sturnus roseus*	.	x	.	.	x	x	.	.	x	.	.
Common Starlings, *S. vulgaris*	.	.	x	x	x	x	.	.	x	.	.
Common Myna, *Acridotheres tristis*	x	.	.	.	x	x	.	.	x	.	.
Bank Myna, *A. ginginianus*	x	.	.	.	x	x	.	.	.	x	.
Indian Tree Pie, *Dendrocitta vagabunda*	x	.	.	x	x	x	x	.	.	.	x
Black Dronogo, *Dicrurus adsimilis*	x	.	.	.	.	x	.	.	x	.	.
House Crow, *Corvus Splendens*	x	.	.	x	.	x	x	x	.	.	.
Jungle Crow, *C. macrorhynchos*	.	.	.	.	x	x	.	.	x	.	.
Red-vented Bulbul, *Pycnonotus cafer*	.	.	.	.	x	x	.	x	.	.	.
Yellow-eyed Babbler, *Chrysoma sinenesis*	x	.	.	.	.	x	.	.	.	x	.
Common Babbler, *Turdoides caudatus*	x	.	.	x	x	x	.	.	x	.	.
Jungle Babbler, *T. striatus*	x	.	.	x	x	x	.	.	x	.	.
Red-breasted Flycatcher, *Muscicapa parva*	.	.	.	.	.	x	.	.	.	x	.
Fantail Flycatcher, *Rhipidura aureola*	x	.	.	.	.	x	.	.	x	x	.

Plain Longtail Warbler, *Prinia subflava*	x	.	.	.	.	x	.	.	x	x	.
Ashy Longtail Warbler, *P. socialis*	x	.	.	.	.	x	.	.	x	.	.
Tailor Bird, *Orthotomus sutorius*	x	.	.	.	.	x	.	.	x	.	.
Orphean Warbler, *Sylvia hortensis*	.	.	x	.	.	x	.	.	.	x	.
Lesser Whitethroat, *S. curruca*	.	.	x	.	.	x	.	.	.	x	.
Stonechat, *Saxicola torquata*	.	.	x	.	.	x	.	.	.	x	.
Pied Bushchat, *S. caprata*	x	.	.	.	.	x	.	.	x	.	.
Strickland's Wheatsar, *Oenanthe picata*	.	.	x	.	.	x	.	.	.	.	x
Black Redstart, *Phoenicurus ochruros*	.	.	x	.	.	x	.	.	.	x	.
Indian Robin, *Saxicoloides fulicata*	x	.	.	.	.	x	.	.	x	.	.
Tree pipit, *Anthus trivialis*	.	.	x	.	.	x	.	.	.	x	.
Paddyfield Pipit, *A. novaeseelandiae*	.	.	x	.	.	x	.	.	x	.	x
Water pipit, *A. spinoletta*	x	.	.	.	.	x	.	.	.	x	.
Yellow Wagtail, *Motacille flava*	.	.	x	.	.	x	.	.	.	x	.
Grey Wagtail, *M. caspica*	.	.	x	.	.	x	.	.	.	x	.
White Wagtail, *M. alba*	.	.	x	.	.	x	.	.	x	.	.
Purple Sunbird, *Nectarinia asiatica*	x	.	.	.	.	x	.	.	.	x	.
White-eye, *Zosterops palpebrosa*	x	.	.	.	x	x	.	.	.	x	.
House sparrow, *Passer domesticus*	x	.	.	x	.	x	.	x	.	.	.
White-throated Munia, *Lonchura malabarica*	x	.	.	x	.	.	.	.	.	x	.
Total:	41	6	19	14	17	57	8	4	20	28	13

the non-availability of suitable nesting sites. Still, the number of the Parakeets are alarmingly high and their harmful role in agriculture is palpable. The house sparrows are well known for their depredations on ripening grain crops. They nest in or around human dwellings. Only rarely are they seen nesting outdoors in trees. Presumably, the outdoor broods have high mortality than the indoor ones. Thus, to inhibit the Sparrow populations, it would be lot easier to destroy their nesting niches rather than trying to kill them in fields.

LITERATURE CITED

Beg, M.A. and Qureshi, J.I. 1972. Birds and their habitats in cultivated areas of Faisalabad Dist. and vicinity. Pak. J. Agric. Sci., : 161–166.

Beg, M.A. and Qureshi, J.I. 1976. Bird of scrublands of Lyallpur region. Pak. J. Agric. Sci., 13: 17–22.

Hussain, M.A. and Bhalla, H.R. 1937. Some birds of Lyallpur and their food. Jour. Bomb. Nat. Hist. Soc., 24: 561–577.

Salim, A. 1972. The Book of Indian Birds. Bomb. Nat. Hist. Soc., Bombay, pp. 162.

Salim, A. and Ripley, S.D. 1968–73. Handbook of the birds of India and Pakistan. Oxford Univ. Press, London. Vol. 1–9.