

DIET OF THE LARGE PIED WAGTAIL

MOTACILLA MADERASPATENSIS

IN AUROVILLE, PONDICHERRY

Boris Verzhutskii

Entomologist, "Palmyra" Auroville, 605111, India.

Salim Ali (1979) mentioned that wagtails have "general habits and food typical of the family". According to investigations on the diet of the White Wagtail (*Motacilla alba*) in the East Siberian mountains it subsisted mainly on flies (Verzhutskii, 1975). This report concerns the diet of the Large Pied Wagtail (*Motacilla maderaspatensis*) in Auroville near Pondicherry in southern India, with emphasis on the variation of food types between adults and nestlings, and their impact on crop destructive insects.

During the nesting period between 23-28 April 2000, 40 samples of excrement were collected - 20 from adults and 20 from their two nestlings - in "quiet community" in Auroville, about 10km north of Pondicherry and less than a kilometre from the seashore. The excrements of nestlings are distinguished by a faecal sac. The bird has a system of nest sanitation common to many other passerines -- at the moment of defecation, the nestlings cover their excrement in a sac and deposit it on the rim of the nest; the parents carry them away.

A binocular microscope and established literature on insects (Mani, 1990; Borror, 1992; Heinrich, 1994) allowed an analysis of all faecal samples.

In the collected excrement, 122 prey items were found in 40 faecal samples. The nestlings consumed 65 and the adults 57. Of these 36 (29.5%) were orthopterans and 29 (23.8%) were lepidopteran larvae. The nestlings consumed a number of spiders, but the imagos of Lepidoptera were generally lacking in their diet though the adults consumed these (Table 1). As is evident from the data presented in Table 1, the nestlings consumed spiders, locusts and caterpillars.

The role of entomophagous birds as agents of insect control is well documented (Ali, 1979; Hawkins, 1986; Luoma, 1999). *Motacilla maderaspatensis* is also an effective biological control agent as is evidenced from the number of crop-destructive Orthoptera and Lepidoptera larvae a single pair and their two

Table 1. The prey of nestling and adult *Motacilla maderaspatensis* (23-28 April 2000) in Auroville.

Prey items	Quantity consumed	
	Nestlings	Adults
Araneae	9	1
Odonata	1	2
Orthoptera	24	12
Isoptera	-	6
Hemiptera	5	3
Homoptera	-	2
Coleoptera	3	3
Diptera	2	2
Lepidoptera		
- Larvae	16	13
- Imagos	1	12
Formicidae	4	1
Total	65	57

young consumed in just six days.

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