

## Birds and Grasshoppers

By J. NEIL McGILP, Adelaide, South Australia

During 1933-1934 South Australia suffered much damage from a plague of grasshoppers which came down from the northern areas and extended further south than is usual with such invasions. Throughout the period mentioned I travelled extensively over pastoral holdings in the north of the State and had an opportunity of collecting first-hand information in regard to the value of birds in the destruction of the grasshoppers.

Under favourable conditions, the plague of grasshoppers first originates in the far north, and by a succession of successful hatchings-out of eggs, it gradually spreads southwards until adverse weather prevents further eggs from hatching out. For this reason I consider that the most valuable birds in the destruction of the pest are those which attack the hatching-out beds in the northern regions, and destroy the young before they reach the flying stage. A list was made of every bird observed at work upon several hatching grounds that were visited and I propose to set down my deductions from notes gathered on the spot. In looking through the list it is surprising to notice the absence of all of the Plover and Dotterel family. One would suppose that such birds would be in their element amidst a moving mass of insects and one can only assume that they prefer to have a rather more vigorous hunt for their food. No Quail were observed, but this may be accounted for by the fact that the grasshopper lays its eggs in hard open spaces often devoid of vegetation.

Though individually a certain bird may prove of greater value than another species, numbers of the species must be taken into consideration in trying to arrive at the destructive value in respect of damage done during the early stages of a grasshopper invasion. From information obtained from notes and observation there is no doubt that the Wood-Swallows are by far the best bird-agents in the destruction of the young non-flying grasshoppers. They were present over every hatching-bed visited in our northern areas. Three species—*Artamus personatus*, *A. superciliosus* and *A. melanops*—were found working together in great numbers and I am informed that in two breeding grounds those birds, assisted in their work by other birds, prevented any young grasshopper from reaching the flying stage. It was very noticeable that the migratory Masked and White-browed Wood-Swallows were to be found only over the hatching-out beds of the grasshoppers. I am convinced that had the migrants come down from the interior at an earlier date and assisted the resident, though somewhat nomadic, Black-faced Wood-Swallow, most of the young grasshoppers would have been destroyed at birth and no plague would have been

as being present in numbers everywhere, while the other two were noted in all except one area.

Black-backed Magpie.—A valuable destructive agent, being plentiful and a greedy feeder.

Ground-Lark.—It was noted in numbers throughout inspections but did not appear to be doing a great deal of destruction.

Hooded Robin, Grey Thrush, White-browed Babbler, Whiteface, Crested Bell-bird, White-plumed Honeyeater and Grey Butcher-bird were all noted, but so infrequently that they are of little value other than as helpers to more numerous birds.

On one occasion a Boobook Owl was flushed out of a small dense bush right in the centre of a patch of young grasshoppers. Circumstantial evidence points to its assisting in the work of destruction.

The only bird seen scratching in the ground in an egg-bed of grasshoppers was the Little or Bennett's Crow. Evidently it was after the eggs.

To sum up I consider that in this State the following birds are very valuable as destroying agents in an attack upon the grasshopper in its most vulnerable phases—Wood-Swallows, Crows, Hawks (owing principally to the Brown Hawk), Magpies, Willy Wagtail, Welcome Swallow, and the following Honeyeaters—Spiny-cheeked, Singing, Yellow-throated Miner, in the order mentioned. If these species were only plentiful enough little trouble would be given by the grasshopper.

## Notes on the White-throated Nightjar

By A. J. ELLIOTT, Cambewarra, New South Wales

As few among us are so fortunate as to have opportunities of observing the home life of the White-throated Nightjar (*Eurostopodus mystacalis*) the recording of some observations I made concerning a pair of these birds towards the end of 1934 may be of interest to members. I had not seen the species previous to December 1 of that year, but on that date a friend informed me that he had located a Nightjar's nest and he offered to show it to me.

On approaching the site my friend pointed out the sitting bird, but so well did its colours match its surroundings that some time elapsed before I distinguished it. When we approached to within about ten yards of the "nest" two Nightjars, the second one being previously unobserved, although resting within a yard of its sitting mate, arose and flew to such a distance through the timber that they became lost to our sight. In flight the general colour of the birds appeared darker than I had anticipated, being very dark grey. The flight was strong and buoyant, the pointed wings appearing to be of unusual length.