## Birds as "Removalists"

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A facet of bird behaviour that might well be given more attention is the impulse, plus the ability, of certain species to remove their eggs or young when supposing them to be in

danger.

I have cited various examples of this behaviour in *Bird Wonders of Australia*, but, as indicated by the title of the relevant chapter ("Carrying the baby in Birdland"), that discussion is almost entirely restricted to the transporting of young. Records of egg-carrying—as distinct from the actions of pilferers, such as cuckoos and crows—are much rarer and at least equally interesting, and, therefore, it is pleasing to be able to present a couple of recent reports on the subject.

Mr. Bruce Kirkwood, of Chiltern, Vic., informs me that in several cases in which nests of Painted Quail (*Turnix varia*) were found, inspection a few hours later revealed that the eggs were gone and the nests destroyed. As he did not believe lizards to be responsible, when he next found a nest he touched the eggs and then, sitting in a car some dis-

tance away, watched the spot through binoculars.

What he saw was the two Quail return to the nest and each sit on it briefly, in turn, after which both walked off quickly to where, about 50 yards away, a dry branch lay on the ground. They then returned to the nest, and after one bird had briefly sat on it again the other bird destroyed it. While this action was proceeding, the first bird went to the fallen branch, where, presently, it was joined by its mate.

"A little later," says Mr. Kirkwood, "I too went to the fallen branch, and there I found a roughly-constructed nest containing three eggs of the Painted Quail. It seemed conclusive that the birds had moved the eggs to the new nest, probably by carrying each one under a wing. Subsequently, the second nest was deserted, possibly due to my intrusion."

The second report in point comes from Mr. J. A. Bravery, of Atherton, North Queensland, and it also has for its subject a ground-nesting bird, namely the Coucal or Swamp-

Pheasant (Centropus phasianinus).

When cutting cane last summer Mr. Bravery came upon a Coucal's nest containing two eggs, and so he left the patch of cane standing. A few hours later, however, he was surprised to find that the eggs had gone and no trace of shells remained. The birds themselves were to be seen in another and denser part of the canefield.

"When I mentioned the disappearance of the eggs to my wife," Mr. Bravery says, "she told me she had seen one of the Coucals carrying something white in its beak, and when she got the binoculars she saw that the object was an egg. It is reasonable to assume that when I disturbed the birds they

hastily prepared a new nest (merely a matter of bending

the cane-tops) and transferred the eggs to it."

Mr. Bravery adds that his son has noticed, on several occasions, that when a Coucal's nest becomes isolated by mowing operations the birds leave the spot and nest in a suitable area not far away; and he believes that the Coucals are quite capable of carrying eggs or young to the new site.

Possibly birds in general find eggs more difficult to carry than nestlings; or is it that the removal impulse operates more strongly when life stirs? At any rate, instances of helpless young birds being transported by their parents are not precisely uncommon. They relate in particular to the Wood-cock in Britain (W. B. Alexander obtained more than 150 records of the kind), and in Australia to various ducks, grebes, nightjars, the bustard, and the Jacana.

Recorded instances of egg-carrying, relatively few, include that of a Peregrine Falcon in Europe which, after being frequently fired at, removed its eggs to another rock-ledge, and that of a species of pigeon in America which is said to have been known several times, when disturbed, to have removed its egg to another tree. In neither of these cases (as cited by W. P. Pycraft in Bird-Life) is any information

given as to how the eggs were carried.

Jacanas (Lotus-birds) are among the few birds that may transport either eggs or nestlings. The Australian species has been known to carry its immature young under wings, and a species in Asia is said by E. H. N. Lowther (A Bird Photographer in India, 1949) to make something of a practice, when alarmed, of constructing a new nest and removing the eggs to it, the carrying being accomplished by pressing the eggs between bill and breast and walking backwards.

Lowther says also that in one particular case a Bronzewinged Jacana became so upset by disturbance that she pushed one egg after another into the water and then tore the nest to pieces. This tallies, to some extent, with a curious report from Bruce Kirkwood-he tells me that when he has disturbed Frogmouths from fresh eggs they have flushed normally but in each of two cases in which incubation was well advanced (as indicated by blood) the startled Frogmouth stood upright and rapidly ate her two eggs.

Viewed broadly, the reactions of birds to nest-disturbances (by man) are certainly very varied. They may sit tight or flush smartly; they may remain quietly nearby, or attack the intruder, or vanish from the scene for quite a time. They may, in particular cases, feign to be injured. Also, there are records in Australia and elsewhere of some disturbed birds deserting or destroying eggs, of others killing their nestlings, and of others again calling half-fledged young from the nest

and leading them away.

Further variants are the transporting of eggs or young, as discussed above, and these actions, in their several phases, are among the most intriguing of the lot. It is noteworthy that they involve birds that nest on the ground or on water.