

It may be of interest to compare a similar happening with Mr. Drew's pair which only once nested a second time. On that occasion they did not succeed in hatching out any young.

By February 25, 1944, the duck was moulting the wing feathers, several large primaries from the right wing coming out one day, and two from the left the next. A lot of breast feathers were also scattered about the pond.

Notes on the Ground Cuckoo-Shrike

By H. E. THOMAS, Mildura, Vic.

The occurrences of the Ground Cuckoo-Shrike (*Pteropodocys maxima*) in the Mildura district are not numerous, but on those occasions when it does appear it is a subject of more than usual interest. This is no doubt partly due to the very fact of its comparative rarity, but it is also a bird of considerable beauty, both of form and plumage, whilst its graceful, undulating flight and distinctive call are fascinating to watch and hear. In its movements about the district it is definitely nomadic and in its comings and goings it is much more irregular than, for instance, its Black-faced relative (*Coracina novaehollandiae*). Further, its occurrence does not seem dictated by seasonal changes, for small parties are as likely to be met with (almost always unexpectedly and in diverse types of country) in mid-winter as in spring or mid-summer.

To illustrate this—last year (1943) I recorded two birds in open plain country near Pooncarrie on June 19. On July 12, near Red Cliffs, three more left a heavily-timbered belt of pine and belar and settled in a nearby fallow paddock, whilst on October 15, in company with Mr. F. E. Howe and Mr. N. Favalaro, I saw another three on a sparsely-timbered box-flat near the river Murray between Mildura and Coomealla. Earlier on the same day, too, Messrs. Favalaro and Howe had recorded a flock of upwards of a dozen in mallee country a few miles further west. Then, on February 16 of this year (1944) I watched five birds feeding on a freshly-mown lucerne patch, of perhaps five acres and almost completely surrounded by vines, in the heart of the Mildura irrigation area, and only a couple of days later I noticed another four in a pine tree growing on the edge of an irrigation channel on the outskirts of Irymple.

Chandler, in the brief but excellent notes which accompany his fine photograph of this bird (*Emu*, vol. XXXVI, p. 9) mentions that he occasionally sees them flying over Red Cliffs, and in a recent conversation he told me of finding a cat with one on his property some time ago. The last two are the only records I have of the species occurring in the closely-settled and irrigated portion of the district: all my

previous notes have been made of birds seen in various parts of the so-called 'dry' areas and always a considerable distance from human habitation.

The nest of the species has been described on numerous occasions and the fact that, like the Black-faced Cuckoo-Shrike, the species sometimes uses an old nest of a Magpie-Lark or Chough as a foundation for its own is well established. Most writers agree, too, that it is frequently a difficult nest to see from the ground and when, on October 16, 1943, I returned with Favaloro to the flat where we had seen the birds the previous day I had ample evidence that such is indeed the case.

Four birds were in the vicinity on our arrival, and after a prolonged search, embracing practically every tree in the neighbourhood, a nest covered by a sitting bird was finally located by Favaloro. It was situated in a grey box in the fork of a horizontal branch some 35 feet from the ground and perhaps 10 feet out from the trunk of the tree, but, in spite of its comparatively exposed position, I found it very hard to detect on those rare occasions throughout the afternoon when it was not covered by one or another of the birds. The day was one of high wind, which possibly accounted for the nest's being so constantly attended, for, although we did not realize it at the time, it must even at that date have contained fairly well-advanced young.

Although, as previously stated, four birds were in evidence, it was difficult to decide how many were actively engaged with the nest. Had the three birds not occupied in sitting on it remained feeding amicably together on the ground beneath the tree it would have been comparatively simple, but, although they did that for lengthy periods, they also indulged in occasional long flights, usually of from ten to fifteen minutes' duration and in varying directions. It was generally on the return of one or another of the birds from these forays that the change-over took place and this naturally confused the issue rather hopelessly. That the nest originally contained at least three eggs is certain, for Favaloro found a broken egg on the ground beneath the tree and three days later, when, on a much calmer day, I again visited the spot, I saw two almost fully-fledged young ones standing in the nest being fed by one of the adult birds. Cameron records (*Emu*, vol. XXXI, pp. 306-7) two nests each inhabited by two pairs of birds, one nest containing five eggs—conclusive proof, he says, of double occupation, especially as two of the eggs differed widely from the others. Whether or not our Mildura birds constitute another community effort is impossible to say, but it certainly seems likely. This assumption is strengthened, too, by the fact that the birds showed none of that hostility to each other so evidenced by the pair described by McGill (*Emu*, vol. XLII, pp. 46-8) towards others of their own kind.

In the field the white rump stands out conspicuously when the bird is in flight and provides a field-key to the identification of the species. The forked tail, on the other hand, is not always noticeable in flight, but as the tail is spread preparatory to alighting and when the bird is moving about the ground it is a prominent feature.

In my limited experience of the species I have usually found them fairly easy to approach, in fact on a couple of occasions I have followed quietly some ten yards behind them for a considerable time as they moved about feeding on the ground. I do remember once, however, walking for upwards of a mile in the blazing sun trying, without success, to get a close view of a pair I put up from the roadside on a big box-flat adjacent to the river Darling. This pair was very timid and at no time allowed me to approach closer than 100 yards. They flew repeatedly from ground to tree then to the ground again in a most aggravating manner, and finally disappeared into the distance across the other side of the river. Apparently, like most other birds, individuals vary somewhat in character.

The Black-shouldered Kite in Western Australia.—In *The Emu*, vol. 43, p. 294, H. M. Whittell refers to existing records of the species in this State. He overlooks my record in 1939 (*Emu*, vol. 38, p. 462) in the Barlee Range of three pairs of nesting birds. The bird is quite unmistakable on the wing, the only bird likely to cause confusion being the Letter-winged Kite, which, as far as I know, has never been recorded from this State. Whittell's reference to the nesting site being almost concealed in the leafy top of the tree, corresponds with my experience. The only nests I have found would not have been seen but for my watching the birds.

I had a single bird visit my farm at Coolup numerous times during 1943, from April to August inclusive. It was often seen hovering over a patch of millet in a swamp where there were plenty of mice. It is noted for its partiality to rats and mice, but a pigeon does not go amiss—as I mentioned in *The Emu*. In this particular case I saw it kill the pigeon coming into water and try to carry it away. It found the weight too great and could not make height, and had to come to earth a short distance away. I am surprised that there are not more records from the Eastern Goldfields, as I understand it has been seen in that area over the last three years. It is a matter for regret that there are not more published records of the movements of the species throughout Australia.—ANGUS ROBINSON, Coolup, W.A., 2/6/44.