

and may gallop quickly after them, before making a thrust with its low-held head. This constant activity and quick walking down the pool is quite unlike the normal movements of a White Heron, which walks slowly and carries itself erect, holding its neck and bill high. The neck appears to have a backwards kink in it about two thirds of the way to the head. While fishing the bird is very deliberate and is stationary frequently. It holds its head high with neck outstretched, slowly reaches forward and out while lowering its head somewhat and flexing the neck a little, then catches its food with a swift thrust. Once only, in many hours of observation, have I seen a White Heron run. It caught a fair sized Yellow-eyed Mullet (commonly referred to hereabouts as a Herring) and attempted to change its grip, but dropped the fish, which left a "v" shape in the shallow water as it made off rapidly. The White Heron ran in a most ungainly fashion for about ten yards then gave up, assuming what appeared to be a most indignant attitude. The heavier orange bill, heavier body, more upright stance, and generally more deliberate movement aid identification of the White Heron. Perhaps the manner of carrying its head held high is the most important feature. The Little Egret keeps its head low.

It appeared that if the Little Egret and White Heron came into competition for food supplies, then the Little Egret would get more than its share in shallow waters.

— P. GRANT



#### ANTING OF STARLINGS AND CHAFFINCH

I have been very interested in the notes on "Anting" as, from 18th December, 1959, until 27th April, 1960, Starlings (*Sturnus vulgaris*) were anting about 30 feet away from my kitchen window. The performance took place at any hour of the day from 8 a.m. until 5.45 p.m. and the procedure was similar to that described by Bathgate (*Notornis VIII*, 265) except that the birds, if disturbed, immediately flew off.

The most spectacular exhibition I was fortunate enough to witness was that of a Chaffinch (*Fringilla coelebs*) where the bird was much more excited and appeared to be in a greater frenzy than the Starlings.

All the anting was done in one particular portion of my neighbour's lawn under and to one side of a maple. During December and January, when the Starlings were accompanied by young, in no case did the young birds "ant." From my observations, the young Starlings had almost completely attained adult plumage before they began anting.

Although Blackbirds (*Turdus merula*) were frequently feeding in this particular area, at no time did I ever see a Blackbird ant.

— L. E. WALKER



#### FEMALE CHAFFINCH SINGING

Among other birds a pair of Chaffinches (*Fringilla coelebs*) resident in the garden is attracted by kitchen scraps suitable for bird food put out on the lawn. On 15/8/59 the hen settled on the short grass and moved about seven feet to the food, singing as she went. While feeding she continued with short bursts of song. The usual final notes of the full song were not added. The movement of her bill and

throat was clearly observed throughout at twenty-seven feet. The cock, a fine bird in good colour, was not present at the time.

B. W. Tucker (The Handbook of British Birds) states: "Imperfect song occasionally from female." That this bird was a female can hardly be doubted. It was as pale as a Chaffinch is ever seen; whereas in August even a young male would show some darker shading or definite colour. Besides the male bird the only other Chaffinch seen about at that time was an undersized female, which could have been a chick of the previous season. The garden pair later built a nest near the house, but deserted after two eggs had been laid.

— (Mrs.) H. M. MCKENZIE



### ARE RIFLEMEN POLYGAMOUS?

During November and December of 1959 and 1960 I found seventeen nests of the South Island Rifleman (*Acanthisitta c. chloris*). Of these nine were 10ft. or more from the ground and were not followed further; and two others were not studied through lack of time or opportunity. Thus there were six nests which were observed from a photographic hide, set at 3½ft. from the nest, for periods ranging from four to eight hours each.

Of these six nests, four had more than the expected complement of two birds in attendance, viz.

Nest No. 2: 1 male and 2 females	No. 13: 2 males and 2 females,
No. 9: 2 males and 1 female	one male and one female
No. 10: 1 male and 2 females	showing juvenile markings.

(v. Plate XXIX) At all four nests the essential criteria of having three (or four) birds at the nest at the same time, all carrying food and all being seen to enter the nest, were fulfilled.

While this is a small series, an incidence of four cases of polygamy (if polygamy is the word to use without too much being assumed) out of the six nests which were watched closely, seems to me a sufficiently high proportion to warrant the assumption that this behaviour is not just abnormal. Since Riflemen are quite strongly territorial, the occurrence of two males to a single female was therefore doubly surprising.

The occurrence of the two birds with juvenile markings I do not attempt to explain. The possibilities, though, provide interesting speculation. (a) That unoccupied birds on discovering a nest take a hand in feeding the young. There is something 'odd' which goes on with Yellowheads (*M. ochrocephala*) which could possibly be explained along these lines. I believe, too, that Guthrie-Smith entertained similar suspicions of Whitehead (*M. albicilla*) and Southern Skua (*Catharacta lonnbergi*) (v. Bird Life on Island and Shore 73-79 and 182-192). In my opinion the Rifleman is too strongly territorial to tolerate this.

(b) That they were part of an earlier brood helping with the nest. If this was so then they were doing something which I have not seen recorded about any other bird.

If neither of these suggestions is acceptable, then we are back to polygamous nesting, which by definition implies sexual maturity. The differences between adult and immature Riflemen are very marked, particularly the streaky spotting on the under surface, which leaves no