

possibility of error for the photographer in a hide. These events were duly recorded on 35 m.m. Kodachrome. Questions which remain are:—

(a) How long do young Riflemen retain immature plumage? Could, for example, a late nestling of last season still be in juvenile plumage in November? (b) Is it possible for a Rifleman in what appears to be obviously immature plumage to be sexually mature?

M. F. SOPER

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#### FAIRY PRION CHICK ATTACKED BY TUATARA

On the night of 25/12/60, as I was walking down the footpath below the lighthouse on The Brothers, I heard a petrel chick crying. I had a torch with me and I soon noticed the tail of a Tuatara protruding from the burrow from which the sound was coming. The tail disappeared and shortly the Tuatara came out of the burrow with the small chick of a Fairy Prion (*P. turtur*) in its mouth. The chick was held by the tail and was crying loudly. The Tuatara stopped and watched me for a short while before making a dash for the taupata scrub about a yard away. As it reached the scrub I seized the Tuatara by the tail and pulled it out. It still held on to the chick until I squeezed it by the neck.

On examining the Prion nestling, I found its rear quarter was badly torn with most of the down missing. I called Mr. Staley and Mr. Clearly and explained what had happened. Then as we knew the burrow from which the chick had come we returned it, though its chances of survival were small.

At various times I have found around this lighthouse station a number of dead chicks with heads missing and parts of the body eaten.

A. WRIGHT

(It has often been suspected that Tuataras may maim and partly devour small petrel chicks (cf. Notornis VIII, 135). This seems to be the first eye-witness account of an actual assault.—Ed.)

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#### MOREPORKS IN A NESTING BOX

Moreporks (*Ninox novae-seelandiae*) were known as regular nocturnal visitors to the grounds of King's College, Middlemore; and on one occasion one was seen roosting by day in the gloomy heart of a large holm-oak. As there were no hollow trees in the vicinity where a Morepork might nest, a nesting box, measuring 15in. x 10in. x 9in., with hole of 3in. diameter, was hopefully put up in this tree in 1958. Starlings, Mynas, Opossums showed some interest, but it appears that the box was finally occupied by rats.

In 1959 the holm-oak had to be felled, so the nesting box was transferred to one of a row of *Cupressus macrocarpa*, some 300 yards away and re-erected at about 40ft. The same year the box was used by a pair of Starlings; and Starlings again appeared to have reclaimed it late in September, 1960. But on 2/10/60 both Starlings were high in the tree screaming abuse in the direction of the box, in the entrance of which a Morepork was visible. During the ensuing weeks a Morepork was usually in or near the box.

The first egg was laid on 20/10/60 and a second probably on the

next day. The eggs measured 38.25 x 33 and 40 x 33.5 m.m. After 30 days the first egg hatched early in the morning of 19/11/60 and the second early the next morning. This rather long incubation period is corroborated by Moon (*Focus on N.Z. Birds*, p. 45) who gives 30-31 days. For the first few days the chicks were fed largely on insects, among which were tree-weta identified by their mouth parts, and huhu beetle. Gradually mice, young rats and birds were added to their diet. The remains of Housesparrow, Goldfinch, Chaffinch and Waxeye were identified from the box. At one examination, for instance, it contained four Housesparrows and a mouse; at another a Waxeye, a Goldfinch, two mice and bits of weta.

During the incubation period only one bird at a time occupied the box. Two days before the eggs hatched, the mate of the sitting bird began to roost in the dark recesses of a nearby tree during the daylight hours; and for a week after the chicks had hatched it continued to roost close at hand.

After a week the fluffy white down of the owlets gave way to a coarser grey down. Three weeks after hatching they were almost fully feathered on head, breast and back. They were still in the nest when term ended on 12/12/60.

Despite the noise of heavy roadmaking machinery and of rifle shots from the school range not twenty yards distant, the clutch was successfully reared. Our visits to the nest seemed to be taken as a matter of course. It seems that by thinning out the Housesparrow population and by taking rats and mice, Moreporks can serve a very useful purpose in a built-up area. Other naturalists may be interested to try a similar experiment for themselves in areas where there is a lack of natural nesting sites.

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#### COMMUNAL DISPLAY IN THE SHINING CUCKOO

Perusal of a recent note on this subject by M. Fitzgerald (*Notornis* IX, 9) prompts me to record a personal observation made at Bethells in January, 1951. Between 15th and 18th January Shining Cuckoos (*C. lucidus*) were observed daily in ones and twos, in trees around the homestead and feeding on caterpillars among the lupins on the sand-hills. About midday on the 16th and again on the afternoon of 17th January, parties, each of four cuckoos, were seen in a grove of pohutukawa trees. On both occasions the birds were very active, moving by short flights from branch to branch and from one tree to the next, usually keeping to the top layer of foliage. During the periods of five to ten minutes for which this activity continued the birds kept up a constant trilling chatter; at the end of each period they dispersed. On the first occasion the cuckoos were the only birds on the tree, but on the second occasion White-eyes, Housesparrows and a Chaffinch were also present. I noted at the time that two of the cuckoos were heavily barred on the whole of the undersurface, but the barring of the other two appeared browner and more mottled, except on the sides of the body where the bars were darker and more regular.

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