BIRDS AT THE BROTHERS.

By J. H. Sutherland.

The previous bird notes from this island, published in Notornis, October, 1951, were for seven months ending February, 1951. I am now able to record further observations made by the keepers at the lighthouse from then till February, 1952. During this year, red-billed gulls, white-fronted terns and dove and diving petrels were ringed. Each night through the year it was recorded whether there were many, some, or few of both species of petrel. Owing to the craggy nature of this island it was not possible to make even a rough count, so it was considered better not to make an estimate of the actual numbers.

We were able to confirm the breeding times of the different birds. The small blue penguins hatched in mid-September, the diving petrels in late October, the gulls and terns about the beginning of December, and the dove petrels in mid-December. During November, starlings were noticed often flying from the same cranny in a cliff, but as it was in an inaccessible place we cannot be sure that they were nesting there. All that can be said is that it is quite likely.

From July to October numbers of goldfinches were seen regularly on the good days. They kept mainly to the shore groundsel which was flowering all through this period. They were often seen plucking the flower heads of this plant, and when it died off the goldfinches left and have not been seen since.

A kingfisher was seen occasionally from 2/4/51 to 12/9/51. We have no means of knowing whether it was the same one, but we never saw more than one at a time. We did not see it feeding at all, but we did notice it was here only on calm sunny days, that is, on days when most skinks would be out. It has not been seen since September.

White-eyes were sometimes seen from March to July, and during August, September and October they were here in numbers almost every day. They kept mainly to the shore koromiko where they appeared to be feeding on a small green insect; but they also visited other shrubs, and several times they were seen working on the ice-plant. We were not able to find out what they were feeding on there. None has been seen since the end of October.

Odd harriers were seen hovering over the island in most months but they appeared more often in September and October. An attempt was made to determine in what direction they were flying, but without any consistent result.

A few sparrows have been with us throughout the year. They are attracted by the scraps thrown out for the few domestic fowls we keep.

A fantail paid us a visit and stayed on the island on 14, 15 16/3/51.

A shining cuckoo was found on the night of 25/9/51 near the tower in a bedraggled and exhausted state, but apparently it was not hurt. There was a thick drizzle at the time. The bird was kept in a warm box overnight and released in the morning when it flew away strongly northwards.

On 22/12/51, during another night of drizzle and fog, a petrel was found dead in the tower court. I was not able to identify it confidently, but from my photograph and description the editor considers it almost certainly to have been a Cook's petrel.

Wandering albatrosses, mollymawks, giant petrels, Marlborough shags, black-backed gull and flocks of small black unidentified petrels have been seen occasionally, either flying past in the distance, or swimming on the sea in the vicinity.

Dove Petrel.—During January, few, and during February and early March, none, was seen. On 23/3/51 a few were seen, and from then until December they were with us in numbers almost every night. It was noticed that there were few, and sometimes none, on nights of bright moonlight, and on very stormy nights. The greatest numbers were present on calm, dark, wet nights. September, October and November were the months when they seemed most active. After 12/12/51 their numbers

declined until 20/1/52, after which none was seen. Over thirty were ringed but few repeated, except those ringed at the nests. The dove petrels had a very poor nesting season, probably because of the great numbers of gulls and terns nesting on the island at the same time. Many heavy falls of rain during the nesting months may have been a contributing cause. This year many chicks were found with their heads bitten off, a sign that the tuatara had been more vicious towards them than usual. In only one nest of the six under observation did a chick hatch, on 12/12/51, but this chick was killed by a tuatara a fortnight later.

Diving Petrel.—Few were seen during January except for the nights of the 17th to 22nd, when a number were noticed on the west side of the island. A few were seen on 4/2/51 and there were many here by 10/2/51. From then until 24/10/51 they were with us in numbers most nights, but like the "dovies" they were not so numerous on nights of bright moonlight. They were often here in numbers on stormy nights when the dove petrels were almost totally absent; but often on nights when there were great numbers of dove petrel here the "divers" would not be seen much in the open. Many of them returned to where they were first ringed. When the nesting season began few were found on the surface, and the numbers of repeats declined. A few returned to where ringed six months later. No doubt a careful search every night would have yielded even better results; but by the nature of our duties this is not possible.

Fifteen nests were chosen for observation. Many of these nests, however, were on the surface, partly concealed by the tussock. In these nests the birds sat on the eggs at night only, and none of the eggs hatched. Several nests were in burrows rather difficult to reach, and in these the parent birds were ringed to see if they return as a pair next season, but no further effort was made to observe the nesting for fear of disturbing the birds.

In the end there was only one nest from which we got results. The adults were first found with the egg on 20/9/51. On 25/10/51 the chick was found, a few days old. On 14/12/51 the chick left. The birds took turns at sitting, but not regularly night about as has been noticed elsewhere.

Several complete families of parents and chicks were ringed, but these nests were not under observation from the beginning of the season. By the end of December most of the chicks had left. Few divers were seen this January, but early in February they returned in considerable numbers.

Little Blue Penguin.—These were heard on odd nights all through the year, but from May to October they seemed to be here in greatest numbers. On 16/9/51 one was found on an egg. The bird was kept under observation and the chick hatched 20/9/51. The chick survived and left the nest during the first week in November.

Red-billed Gull and White-fronted Tern.—Odd gulls were seen all the year. They began gathering in September ond October, but did not arrive together. They gradually picked out nesting places and settled in. By the end of October the nesting colonies were well established, and at this time the white-fronted terns arrived. The terns set up their colonies much more quickly. Both gulls and terns began laying in the first week in November and the first chicks of both species were hatched at the end of the month. Laying and hatching continued till the end of the year. Both gulls and terns left during February. This year was a good season for both species; there were a great many more than last year; the terns were not molested much by the gulls and the gulls were not noticed attacking neighbouring gull chicks as often was the case last year. Many hundreds of gull and tern chicks survived and a few of each were ringed.

One of the 1950 gull chicks was recovered in Tory Channel, about seven miles away, through the bird becoming temporarily fouled in the ropes on the deck of a vessel.

I should like to thank my fellow-keepers for their assistance in keeping records; Mr. R. H. D. Stidolph, for his assistance in identifying doubtful birds; Mr. W. H. Dawbin, for his interest in the work on the petrels; and Mr. J. M. Cunningham, for help and encouragement in the ringing operations.