## MANA ISLAND BIRDS.

By Eric H. Sedgwick, Western Australia.

On 7th April, 1954, I accompanied Mr. Graeme Ramsay, of Wellington, on an excursion to Mana Island. As little appears to have been published on this area since "Mana Island," Oliver and Wodzicki, "N.Z. Science Review," vol 2, 1944, a few comments on the birds encountered may not be out of place.

Proceeding from Paremata by launch we noted a banded dotterel (Charadrius bicinctus) on an estuary flat and, even before reaching the open sea, encountered gannets (Sula bassana serrator). In all, perhaps ten scattered birds were flying and diving over the estuary and strait. One Caspian tern (Hydroprogne caspia) was seen and a few white-fronted tern (Sterna striata) were diving in broken water at the mouth of the estuary. Two black shags (Phalacrocorax carbo) were resting on the rocks nearby.

In the strait between Mana and the mainland, the motion of the launch became rather violent, making precise observation difficult. One albatross with underwing pattern suggesting Diomedea cauta was seen and glimpses were obtained of a few dark shearwaters (Puffinus ? sp.) and prions (Pachyptila ? sp.). Fluttering shearwaters (Puffinus gavia) were very plentiful. First we encountered scattered birds in flight, then some swimming, and, finally, as we approached Mana Island, we passed through rafts of resting birds. Many could be seen from our landing place near the Island homestead, and birds were seen throughout the day, especially from the cliffs at the southern end of the island, where birds were swimming. Relatively few were seen on the return journey.

Our main ornithological objective was to locate and examine the muttonbird rookery at the south end of the island. The shepherd on the island informed us that birders had taken 38 birds in 1953, but the rookery had not been molested in 1954. Most of the burrows appeared deserted, but we carefully examined one which emitted a strong odour of mutton-bird. This, however, seemed to be empty.

The rookery, 105 yards in length and averaging about 20 yards in width, occupies a slope of 45 degrees or more leading down to cliffs which fall almost sheer for perhaps 200 feet to a narrow, rocky beach. The slope is heavily grassed, the grass being grazed short by sheep. There are however, occasional clumps of Juncus and Cassinia leptophylla, a few thistles? Onopordon and some Muchlenbeckia. The burrows were exposed and not sheltered by these larger plants. They penetrate a firm sandy loam which does not yield readily. Many burrows appeared to have been modified, possibly by the activities of birders. Graeme Ramsay traversed the rookery from end to end, counting forty burrows. This figure does not represent the total number.

While examining the rookery we noted a reef heron (Egretta sacra) on the rocks below and a harrier (Circus approximans) thrice appeared, working along the cliff top. Near the homestead we noted blackbirds (Turdus merula) among the macrocarpa, starlings (Sturnus vulgaris), house sparrows (Passer domesticus) and three white-backed magpies (Gymnorhina hypoleuca). A further magpie was later seen at the northern end of the island near a grove of macrocarpa and pinus surrounding a small pool. This grove sheltered a number of chaffinches (Fringilla coelebs), a fantail (Rhipidura fuliginosa) and a kingfisher (Halcyon sancta). The skylark (Alauda arvensis) was probably the dominant species of the pasture land which occupies most of the island, but New Zealand pipits (Anthus novaeseelandiae) also appeared to be present. Lesser redpoll (Carduelis flammea) occurred sparingly among the native vegetation on the northern slopes.

Most of the species recorded on our outward journey were seen again on our return. In addition, we saw a pied shag (Phalacrocorax varius) in flight over the strait and five black swan (Cygnus atratus) in the estuary.

Penguins (Eudyptula minor) were reported as nesting on the island, and black-backed gull (Larus dominicanus) appeared to have nested on the northern shore.