SOME BIRDS OF THE MOKOHINAU GROUP.

By R. V. Roberts, Wellington.

On the 30th December 1952 a call was made at Fanal Island. The following birds were found to be plentiful: New Zealand parakeet (**Cyanoramphus novaezelandiae**), tui (**Prosthemadera novaeseelandiae**) and bellbird (**Anthornis melanura**). Moreporks (**Ninox novaeseelandiae**) were heard several times during the day and one was caught as it came out of a petrel burrow. The bird was photographed and released. It was a young bird. Native pigeons (**Hemiphaga novaeseelandiae**) were heard flying overhead or through the trees several times, but only three birds were seen roosting in the shade. Two pair of pied tits (**Petroica macrocephala**) were located near the waterholes and both pairs were very shy. Their calls were heard for some time after they had moved away from the waterhole.

Starlings (**Sturnus vulgaris**) were very plentiful on the **Phormium tenax** and the adult birds were accompanied by a number of young. In the empty nest of a tui, found in manuka scrub at a height of just on seven feet from the ground, a few nest feathers were found covered with a grey lice usually associated with starlings.

The main muttonbird on the island is the **Pterodroma macroptera,** the grey-faced petrel. The majority of the young birds had already departed from the burrows. A sooty shearwater, **Puffinus griseus,** was found sitting on a very dirty, discoloured white egg, which measured 73x50 mm., and the fight put up by this bird and one or two others assured the Maoris that the burrows were occupied by a much fiercer petrel than the grey-faced petrel. The sooty shearwaters nest on the island some five to six months later than the grey-faced petrels.

Although kaka (**Nestor meridionalis**) calls were heard many times, no birds were seen. Two calls were traced to a young tui. The Maoris stated that kaka have been seen on the island in the last three years. At the main island of the group, Burgess Island, where we put in the following day, 31st December, 1952, the head lightkeeper told us that kaka migrated through the island from the north at a certain time of the year and perched near the light for a day only, to disappear to the south on the following night.

On the 31st the young of a grey-faced petrel was photographed, together with a young red-billed gull (**Larus novaehollandiae**) which could not fly. Many of the young red-billed gulls had walked away from one of the nearby colonies towards the wharf where there was much activity. These gulls were very hungry and fought bitterly for every scrap of food. Over 1200 red-billed gulls were counted on the beach when fish were being cleaned. Young gulls unable to fly, ran down the tramway towards the beach, attracted by the loud screaming of the birds on the beach.

At the foot of the lighthouse were many dead white-faced storm petrels (**Pelagodroma marina**). One of their known nesting islets is just to the south of Burgess Island near the wharf. In the afternoon, a flock of red-fronted parakeets flew from Ladies' Island to the only stand of pohutukawa on Burgess Island, with much chattering. Six or seven were counted that afternoon. Lone large pied shags (**Phalacrocorax varius**) were seen on low-lying rocks near the shore of the outlying islands to the westward of Burgess Island. Grey-faced petrels were found nesting on several of these islands, but no sooty shearwaters.

On the return journey later that afternoon an immature parasitic jaeger (**Stercorarius parasiticus**) followed the launch for some time. The bird was in the light-phase plumage. It pursued many of the gulls which had collected for scraps of meat thrown overboard from the launch. The bird circled the launch many times and flew some distance away at times to chase gannets (**Sula b. serrator**) and white-fronted terns (**Sterna striata**) returning with food for their young. The chase could be seen in its entirety until the skua was diving downwards to pick up the food dropped by the harried bird. In every case the bird robbed of food continued flying in the same direction. The gannets and terns were flying towards Cathedral Rocks and not southwards. The skua on occasions rested on the sea until

the launch was perhaps a quarter of a mile away but the bird had no difficulty in catching up with the launch in a matter of seconds. We encouraged it to follow by feeding pieces of meat and fat to the gulls following the launch.

The white deposit of guano on Cathedral Rocks could be seen many miles away. There was no direct evidence to show that the rocks were used this year as a breeding ground, but it is possible as the gannets were flying in that direction. The only other likely place would be Groper Rock. The Maoris informed me that gannets had bred on Groper Rock a few years ago but were apparently driven off by the enormous numbers of mosquitoes that bred in the fresh-water lake in a crater on top of the rock. The Maoris who were fishing nearby for kingfish, landed to have a look at the young birds. Perhaps if the insects were killed by a small application of oil on the freshwater lake, the gannets might come back to the rock.

In the late afternoon a black-browed mollymawk (**Diomedea melanophris**) circled the launch several times. The black upper wing coverts with no wing patches of white, the black feathers across its back, the black edging of the undersurface of the wings and the large black eye patch immediately caught my eye and established its identity without question. A giant petrel (**Macronectes giganteus**) was seen a few minutes later as we approached the Needles. A few unidentified petrels were circling towards the small islands off the coast of Great Barrier Island itself, but in the twilight it was not worthwhile guessing their identity.

On the previous day, however, in the strong sunlight and calm seas, the petrels were seen to advantage, particularly between Katherine Bay and Fanal Island. The most common species was the fluttering shearwater (**Puffinus gavia**) which was seen in large flocks. The two white side patches identified these birds for us. The plump and round-bodied diving petrels (**Pelecanoides urinatrix**) only took to the air when the launch came very close to the flocks. Some birds were seen to almost fly right out of the water. Some were so heavy with food that they had difficulty in taking the air and sank back to paddle furiously away from the launch as it neared them again. It was a field day for petrels as all allowed the launch to approach closely before they took to the air. Although some 2000 petrels were seen in the 3½-hour trip it was only possible to identify single petrels that came close enough to spot the difference. Odd sooty shearwaters, grey-faced petrels, flesh-footed shearwaters (**Puffinus carneipes**) were easy when one could see the bill closely. Many smaller petrels were also seen.

THE WINTER FOOD OF THE BLACKBIRD IN N.Z.

By C. McCann, Wellington.

The widespread occurrence of the black nightshade (**Solanum nigrum**) (Linn.) an exotic weed, in all possible localities, many far distant from human habitation and influence, set a trend of thought in motion. How did this almost cosmopolitan weed spread so fast in New Zealand? As the fruit of the plant is a berry and a poisonous one at that, the most likely agent of dispersal was in all probability a bird. It was not long before I discovered the most likely bird, the blackbird (**Turdus merula**). Whenever the life-cycle of a bird and a plant are linked, it becomes necessary to study the interrelation that exists between the habit and habitat of the two individuals. This is common to any interrelation. However, before going further, it is necessary to clarify a few points.

Frequently, I have heard the black nightshade (**S. nigrum**) referred to as the deadly nightshade. The deadly nightshade is known as **Atropha belladonna** (Linn.) and is the source of the drug, belladonna. It is more poisonous than the black nightshade and as far as I am aware does not occur in New Zealand. Both the nightshades belong to the same family, **Solanaceae**, a family, strangely enough, which embraces some of our commonest food plants, such as the potato, tomato and several others. The family contains a poisonous substance peculiar to itself known as solanine,