A VISIT TO THE CAVALLI ISLANDS.

By R. B. Sibson, Auckland.

In mid-December, 1951, as the result of an invitation generously extended by Mr. G. McDonald, a week was spent on the Cavalli Islands by G. J. Burton, R. N. Buttle, M. R. Goodwin, S. C. Rutherfurd, V. M. Rutherfurd, T. G. Short, Dr. O. F. Lamb and the writer, all members of the King's College Bird Cub. Transport between the mainland and the islands was provided by Mr. T. M. Roberts in the big-game fishing launch "Lone Star," in which the party found itself at 7 a.m. on December 13 sailing down the miniature fiordland of Whangaroa Harbour. Outside the heads and off Flat Is., fluttering and Buller's shearwaters were seen at their best in the stiff breeze.

By 10 a.m. we were landing on Motukawanui, the largest island in the group. Mr. McDonald and his sons met us on the beach of Wai-iti Bay and directed us to a camp site which they had cleared on a step among manuka up a steep slope some forty feet above the beach. The wisdom of their choice was proved when our tents were not airborne in a westerly gale which struck the islands a few days later. During the ensuing days we received many kindnesses from Mr. and Mrs. McDonald and their family who did all they could to make our stay in the Cavallis both comfortable and successful. Among other things, a 12ft. dinghy was put at our disposal. This, fitted with an outboard motor, and piloted by Dr. Lamb, enabled us, when the weather permitted, to effect landings on several of the smaller islands.

Lying a few miles offshore from Matauri Bay, the score or so of islands which form the Cavalli group, are contained within a rectangle of five miles by two in latitude 35° S. In the centre of the group is Motukawanui, two miles long and rising to a height of 550 feet. Although most of this island has been cleared and provides good grazing for cattle and sheep, patches of bush remain in some gullies and on the cliffs, thus enabling a small population of bellbirds to survive. The homestead is situated at the head of Horseshoe Bay. Our camp was sited just over a narrow neck of land from there in Wai-iti Bay.

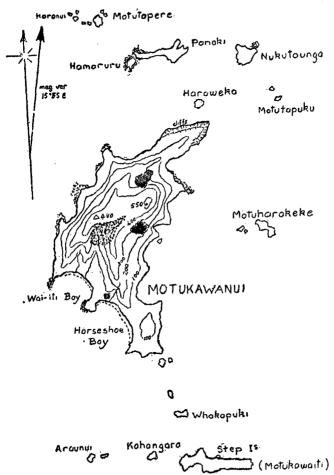
The next largest island, Motukawaiti or Step Is., is also cleared and carries cattle and sheep. During half a day on December 17, S.C.R. and R.B.S. covered most of this island.

A mile to the east of Motukawanui, Motuharakeke (Flax Is.), a name which fortunately it belies, is perhaps the most unspoilt of the smaller islands. The natural vegetation has defied the efforts of would-be burners and an exceedingly stubborn combination of taupata (Coprosma retusa) and Hymenanthera greets the human invader and slows his progress to a standstill. In winter, great numbers of starlings are said to use the island as a roost. It would be interesting to know if the density of the scrub is to be attributed to the enriching of the soil by the starlings' droppings. Beneath this scrub the soil is riddled with the burrows of fluttering shearwaters and diving petrels. Outside the scrub the burrows are also plentiful on such lower slopes as are covered with a thick mat of mesembryanthemum. R.N.B. and M.R.G. were landed for a short while on December 15 and reported among other things, the presence of the house sparrow. G.J.B. and R.B.S. spent more than an hour ashore on December 19, confirmed the presence of Passer domesticus, and ringed two young fluttering shearwaters which were nearly ready to leave their burrows and three well-grown young diving petrels. It was on Motuharakeke that Mr. A. T. Pycroft once in November found burrows occupied by sooty shearwaters.

To the north of Motukawanui lies a chain of islets, some of which have been occupied by Maoris in the past. On these most of the original vegetation has been burnt—the reason being, so we were told, to facilitate the taking of Oi (Pterodroma macroptera)—and has been replaced by a dense growth of flax (Phormium tenax). On December 15 landings were made on Hamaruru, where the most important find was an extensive colony of white-faced storm petrels; on Panaki, which yielded little of interest, and

on Nukutaunga. On this steeply rising and verdant island two parties were put ashore. One party did not get far, but M.R.G. and R.B.S. battled their way to the top through a young jungle of houpara, wharangi and mapou. Petrel burrows were not numerous and none in occupation could be found. There were signs that the top of the island was once a pa.

Little mention of the Cavallis appears in the literature of N.Z. ornithology. Among the breeding petrels of the group Falla (Rec. Auck. Inst. Mus., Vol. I., No. 5, 1934) mentions P. urinatrix, P. marina, P. griseus and P. macroptera, but omits P. gavia. This paper is offered in the hope that it may help to fill a gap in our knowledge of the birds of the offshore islands of New Zealand.



Sketch Map of the Cavalli Islands.

SPECIES LIST.

Little Blue Penguin (Eudyptula minor).—Fairly common. A few were still incubating eggs. One nest was about 150 feet up an almost vertical slope. If caught by the Maoris they are eaten with avidity.

Diving Petrel (Pelecanoides urinatrix).—Though none was seen at sea there is a big breeding colony on Motukarakeke. Young in the nest on

December 19 were well-feathered. The remains of many eaten by harriers were found.

White-faced Storm Petrel (Pelagodroma marina).—Many were breeding on Hamaruru. A few nests were in open ground near the summit, but the majority were in two gullies with steeply sloping sides under a canopy of pohutukawas. Some adults were on eggs and young in the downy stage were found in burrows where no adult was present. Despite their nocturnal comings and goings some fall victims to harriers.

Giant Petrel (Macronectes giganteus).—One was just outside Wai-iti Bay on December 19; rather far north for midsummer.

Lesser Broad-billed Prion (Pachyptila salvini).—One corpse on Motu-kawaiti, a wreck of the winter gales.

Fairy Prion (P. turtur) .-- One corpse on Motukawaiti.

Flesh-footed Shearwater (Puffinus carneipes). — A few were seen between the Cavallis and the mainland on December 14. Surprisingly scarce.

Buller's Shearwater (P. bulleri).—Many off Flat Is. on December 13. Frequently seen with P. gavia around the Cavallis.

Fluttering Shearwater (P. gavia).—There is a considerable breeding colony on Motuharakeke, which they share with diving petrels and which may be the land-base of the flock of 800-1000 which was usually to be seen in Cavalli waters. Some nests were under thick mesembryanthemum only a few feet above sea level. Young were in different stages of development, some being in down, some almost fully feathered; and one bird seen at sea and hardly capable of flight was believed to be a youngster.

Allied Shearwater (P. assimilis).—One corpse on Motukawanui.

Grey-faced Petrel (Pterodroma macroptera).—Known locally as the Oi, this is (or was) the most generally distributed of the petrels in the Cavallis and its burrows may be found on most suitable headlands and slopes. Mutton-birding has much reduced its numbers. We learnt that about 200 were taken in November. Only those which breed in inaccessible places have much chance of escaping the attentions of the mainland Maoris. We were unable to find a single occupied burrow. None was seen at sea.

Black Shag (Phalacrocorax carbo).—Occasional visitor from the mainland. One on December 18.

Pied Shag (P. varius).—This is the common breeding shag of the Cavallis. A colony of c. 15 pairs occupies a typical site in pohutukawas on the west coast of Motukawanui. The breeding season was almost over. Most of the young were on the wing.

White-throated Shag (P. melanoleucus).—Occasional visitor from the mainland. One on December 19.

Gannet (Moris serrator).—A few were always to be seen. The name of the island, Motu-tapuku, may indicate that it was once a gannetry.

Reef Heron (Demigretta sacra).—A pair had a nest in a cave near Wai-iti Bay. Breeding was evidently late. The nest contained one egg on December 14, two on December 16, still two on December 19. Mrs. McDonald informed me that in due course "the herons hatched out." A single bird was seen on Motukawaiti.

Harrier (Circus approximans).—As many as five pairs may breed in the group. On Hamaruru they were taking toll of stormy petrels and on Motuharakeke of diving petrels. A youngster just able to fly was flushed on Panaki.

Brown Quail (Synoicus ypsilophorus).—These occasional visitors from the mainland have been recorded by Mr. McDonald. None was seen during our stay.

N.Z. Dotterel (Pluviorhynchus obscurus).—The finding of five pairs was a pleasant surprise. They were distributed as follows:—(a) Motu-

kawanui: Horseshoe Bay, 1 pair; Northern Bay, 2 pairs. (b) Motukawaiti: 2 pairs. The two pairs in Northern Bay were occupying the type of habitat that one usually associates with this species, though the area of sand was small nor was there a stream running through it to the sea; two pairs may have found such a restricted area a tight squeeze. We could only find one nest, which contained one egg on Dec. 15. The other three pairs were occupying narrow stony beaches with no hinterland of sand. At the beginning of our stay, the Horseshoe Bay birds sometimes flew over to Wai-iti Bay—a much more typical breeding habitat—to feed; but at the end of our stay they remained glued to one strip of stony beach half a mile away. The two pairs on the north coast of Motukawaiti were also cramped for room. A nest with one egg was found on Dec. 17. Nearby were the remains of another egg, eaten. As we were sailing back to Whangaroa on Dec. 20, Mr. T. M. Roberts showed us another pair occupying a very small narrow stony beach in company with one pair of Caspian terns which had a well-feathered chick on Arrow Island, just outside the entrance to Whangaroa Harbour.

White-fronted Tern (Sterna striata).—The breeding population was remarkably small, a few dozen pairs on rocks off Motukawaiti.

Caspian Tern (Hydroprogne caspia).—According to Mr. McDonald, two pairs usually breed. Nesting this year was late. One pair in Horseshoe Bay had lost their first nest and laid again during our stay. The pair on Motukawaiti had two eggs on December 17.

Red-billed Gull (Larus novaehollandiae).—There were two small colonies (a) Wai-iti Bay, 48 pairs; (b) Motukawaiti, a few among the terns. Nesting was late, many eggs were still not hatched on December 20. Eggs are taken for eating by the Maoris. Many hundreds of gulls came in from the sea in the late afternoon to roost on the smaller islands to the north of Motukawanui.

Black-backed Gull (L. dominicanus).—Not present in great numbers. Three pairs had nests on the outskirts of the smaller gulls' colony in Wai-iti Bay. Otherwise-they were mainly in isolated pairs around the coast of Motukawanui and Motukawaiti. They were missing from many of the smaller islands.

Morepork (Ninox novaescelandiae).—Heard on Dec. 17. Mr. Mc-Donald related how once in broad daylight a morepork swooped and seized a rat (Rattus? exulans) which had been disturbed from an old puriri.

Kingfisher (Halcyon sanctus).—Apparently rather scarce. Two pairs were located on Motukawanui. One was heard on Panaki.

Pipit (Anthus novaescelandiae).—Pleasingly abundant on Motukawanui; and present on some of the smaller islands.

Grey Warbler (Pseudogerygone igata).—The scrub and bush on Motukawanui supported a normal population. Song was frequent. None was found on the other islands.

Fantail (Rhipidura fuliginosa).—Found only in the bush on Motu-kawanui, where they were plentiful.

Silvereye (Zosterops lateralis).—Easily the most numerous of the native passerines. Breeding even on the smaller islands, e.g., on Nukutaunga where a nest was found. Their abundance is a noteworthy contrast to their scarcity on Little Barrier and Hen Island.

Tui (Prosthemadera novaescelandiae).—Probably one pair breeding on Motukawanui, one being heard in the bush and one seen elsewhere. Mr. McDonald has seen up to six at once and thinks that tuis may sometimes fly over from the mainland.

Bellbird (Anthornis melanura).—The surviving patches of bush on Motukawarui support a small population, perhaps 12 pairs. The song of these Cavalli bellbirds is curiously distinct, a wader-like call usually of four more or less even notes pew-pew-pew-pew, being most commonly heard. It

is quite unlike the typical bellbird song. We were sitting on the highest point of the island when we first heard this far-carrying call from birds which were located some hundreds of feet below us among pohutukawas on the eastern cliffs. It was something of a surprise to find that these puzzling calls were coming from bellbirds. The typical song was not heard at all. Subsequently we often heard the quadruple call from bellbirds in the bush. Mr. A. T. Pycroft tells me that in his opinion the Cavalli bellbirds were poor singers. It was evidently a late nesting season. No young birds were seen. A nest found on December 18 contained two eggs.

EUROPEAN BIRDS.

Skylark (Alauda arvensis).—Plentiful on the two main islands which are ideal lark country.

Song Thrush (Turdus ericetorum).—Plentiful on Motukawanui. Song was mostly at dawn and in the evening; e.g., many were in full song at dusk on Dec. 17. At noon on Dec. 14 a burst of song from one bird was heard.

Blackbird (Turdus merula).—Apparently more enterprising than the song thrush in colonising the outlying islets. An old nest was found on Motuharakeke. Although song was spasmodic, several birds were still in good voice on Dec. 17.

Dunnock (Prunella modularis).—This species has colonised the group most successfully. Song was full and frequent. A nest found on Dec. 15 contained four eggs.

Starling (Sturnus vulgaris).—Breeds commonly on the cliffs. No big flocks were noted.

Greenfinch (Chloris chloris).—Scarce. Males were in full song.

Goldfinch (Carduelis carduelis).—Abundant. In small flocks.

Yellowhammer (Emberiza citrinella).—Thinly distributed on Motukawanui. Singing was irregular.

Chaffinch (Fringilla coelebs).—The commonest of the finches. Song was general.

House Sparrow (Passer domesticus).—It was surprising to find these frequenting clefts and cliffs on the outlying islets. They were in a similar situation on Motukawanui and were scarce about the homestead.

DISTRIBUTION OF PASSERINES ON CAVALLIS.

Native.							European.									
Name of Island	Pipit	Riro-riro	Fantail	Bellbird	Tui	White-eye	Skylark	Thrush	Blackbird	Dunnock	Starling	Greenfinch	Goldfinch	Yellowhammer	Chaffinch	Sparrow
Motukawanui	x	х	x	12	1	x	x	x	x	x	x	4	x	8	x	4
Motukawaiti	v	_	_	_		v	х	v	5	5	v	_	v		7	4
Hamaruru	1	_	_	_	_	v	_	_	2	2	v	_	1		2	3
Panaki	_	_	_	_	_	v	-	_	1	1	v	_	1	_	1	2
Nukutaunga	_		_	_	_	v		_	_	_	v .	_	_	_	1	
Motuharakeke	-	_	_	_	_	v	-	_	1	2	v	-	_	_	1	3

Legend.—Figures represent number of singing males heard or of pairs believed to be breeding.

x = estimated population of 20 or more pairs.

v = present, but no estimate of numbers made, probably 5-10 pairs.