### A VISIT TO HEN ISLAND.

By R. B. Sibson, Auckland.

On the first two island-trips of the King's College Bird Club in December, 1946, and December 1947-January, 1948, thirteen members had an opportunity of visiting Little Barrier. For the third trip it was decided to spend a week as soon as possible after Christmas, 1948, on Taranga, the main and southernmost island of the Hen and Chicken archipelago, which lies on the outer fringe of the Hauraki Gulf. Permission to land and camp was readily given by the Department of Lands and Survey. In the party were six schoolboys: J. V. Allison, D. E. Caughey, G. W. Gummer, B. D. Heather, J. B. Morris, J. B. Morrison; Mr. D. A. Urquhart, Dr. O. F. Lamb and the writer.

By arrangement with Mr. N. Warren by whose helpful co-operation our travelling to and from the island was made easy, we left Leigh in the Gunner on the morning of December 29 and headed north over a calm stretch of sea, where petrels and shearwaters of one kind or another were in view all the time, although our course took us near only the stragglers from the main body which was dimly discernible away to the east. A curious absentee was the diving petrel (P. urinatrix); and despite a sharp look-out no sooty shearwaters (P. griseus) could be identified among the numerous flesh-footed (P. carneipes).

Eleven miles east of Waipu and 22 miles north of Cape Rodney, Taranga rises steeply to a height of 1,353 feet. Much of its 1175 acres is still covered with the original bush; but there are areas of modified vegetation, where many years ago the island was occupied by Maoris. Despite the abundance of a species of rat which were easily caught and of which several specimens were brought back for study, the island is an ideal sanctuary. In this respect there is a notable difference between Hen Island and Little Barrier, where wild cats survive from an earlier occupation and constitute both a menace and a problem. On Little Barrier the remains of cat-eaten petrels, especially of **Pterodroma cookii**, are all too common. On Hen Island it was difficult to find a dead petrel at all.

In almost windless weather a landing was expeditiously effected halfway along the west coast of the island; the bulky stores were hauled up a steep slope to the traditional camp-site; and by evening a comfortable camp had been made. Whilst the tents were being pitched the first saddlebacks appeared. They are the crowning glory of Hen Island. Yet it is a sad thought that after a few days we were to become blase, even about such a debonair aristocrat as Creadion carunculatus. however, our becoming blase was really something to be desired. It could only arise from the fact that saddlebacks were in such numbers that we could see them easily. After dusk there came the excitement of hearing the incoming petrels, a new experience for some who had not been on a "petrel" island before. Overhead, numerous "titi" calls told us that Pycroft's petrels, surely one of the daintiest and most exquisite of all the procellariiformes, were active over their nesting ground. Other wild cries, which at times sounded like a sick person retching excruciatingly, were attributed to the less elegant fluttering shearwaters.

At one time or another most of New Zealand's leading ornithologists have visited Taranga, so that we could not expect to make any important contribution to the knowledge of the birds of this country. Although we had youth and energy in our favour, we were far from satisfied with the amount of ground covered in our exploration of this rugged island. Steep boulder-strewn slopes, sheer inland cliffs and a plethora of ridges which end in abrupt sea-cliffs, make the going tough, and we soon discovered that it took a long time to go a little way. On January 2, Caughey, Heather and Urquhart set off eastwards and camped above Old Woman Cove. The incoming of petrels during that night was most disappointing. The northern heavily-bushed slopes remained terra incognita.

We got no nearer than to gaze hopefully down upon them from the summit.

Nor were we as successful in the finding of nests as we had hoped. For most of the passerines the nesting season was all but over; and a conscientious examination of accessible holes in trees produced only meagre results, with the notable exception of one nest of saddlebacks. Following the lead given by Turbott (Emu, xl., pp. 158-161) we intended to do some census work; but the obvious cessation of territorial instinct in many of the passerines and most of the parrakeets made it doubtful if any reliable results would have been achieved. After almost exactly a week the Gunner arrived to take us off in the calmest of weather on the morning of January 5.

Accounts of the birds on Hen Island are not easily come by. As the island has scarcely been mentioned in Bird Notes of the O.S.N.Z., it is hoped that the following list may serve as a guide to future visiting ornithologists. Certain papers, namely Falla (Rec. Auck. Inst. Mus. I. 5), Fleming (Emu, xli, pp 76-80) and Turbott (Emu, xl., pp. 158-161) have proved most helpful. I am especially grateful to Mr. E. G. Turbott, of the Auckland War Memorial Museum, not only for supplying me with a list of pertinent literature but also for much useful advice about camping on the island. A quotation from Shakespeare's "Tempest" is not inappropriate—

"The isle is full of noises, sounds and sweet airs, that give delight and hurt not."

### LIST OF SPECIES.

Little Blue Penguin (Eudyptula minor). — Although the breeding season was nearly over, several birds were found in burrows, and on January 2 one was brooding a newly-hatched youngster and a chipping egg. Some burrows were on the steep inland slopes at an estimated height of 500 feet. There must often be competition for nesting holes between penguins and petrels. There was little noise at dusk of penguins coming ashore.

White-faced Storm Petrel (Pelagodroma marina).—Common on both crossings, especially near Sail Rock.

Flesh-footed Shearwater (Puffinus carneipes).—Plentiful at sea. Towards dusk every day a few dark shearwaters which seemed to be mainly of this species would be sweeping up and down gradually closing on the island. A small colony was located on a headland on the west coast. Some were watched and caught as they came in after dusk.

Sooty Shearwater (P. griseus).—Although none could be certainly identified at sea it was very gratifying to find one sitting on an egg in the middle of a small colony of flesh-footed shearwaters. I have been told that Stead found a small colony of P. griseus on the slopes about the bay to the north of the light. Among the shearwaters which we scanned as they gathered offshore in the evening none could be identified as griseus.

Buller's Shearwater (P. bulleri).—Quite numerous at sea, but no big concentrations were seen. In the evening odd birds regularly joined the few carneipes which were gathering offshore.

Fluttering Shearwater (P. gavia).—Plentiful at sea. A few came in noisily on our first few nights, but none was heard after that. There seemed to be two possible explanations: (a) That there was a new moon on December 30 and increasing moonlight during our last nights on the island. (b) That the nesting season was nearly over. After a long painstaking search, Urquhart found two occupied burrows, one containing an adult, the other a large youngster still in down. According to Fleming P. gavia almost monopolises the higher ridges.

Allied Shearwater (P. assimilis).—Hen Island is known to be one of the nesting places of the subspecies haurakiensis; but as they are winter breeders we could not expect to find them ashore. A corpse was found on the face of one of the great boulders which jut out above the treetops. As we were leaving a single bird flew swiftly past the S.W. corner of the island

Grey-faced Petrel (Pterodroma macroptera).—This is also a winter breeder but being a much larger bird than P. assimilis its incubation and nesting periods take longer; and so we were able to find considerable numbers of fully-fledged young in the burrows just ready to leave. Often at night they would crash near our camp, attracted perhaps by the glow of the fire. They must be the dominant petrels of the island, their only possible rivals being P. gavia, whose numbers owing to the time of the year, we could not assess. Macroptera seems to nest at any height from near sea level to the highest ridges where the soft ground was riddled with burrows, and where we searched hopefully, but in vain, for evidence of the black petrel (Procellaria parkinsoni) which is breeding on Little Barrier, 25 miles to the south-east.

Cook's Petrel (P. cookii).—On January 5 a few gadfly petrels, apparently of this species, were seen a few miles north of Leigh between our course and the mouth of the Pakiri River.

Pycroft's Petrel (P. pycrofti).—As we neared Taranga, we had glimpses of three gadfly petrels which seemed to be of this species. We have little to add to the admirable account of the behaviour of these petrels given by Fleming (Emu, xli., pp. 76-80). During our first four nights on the island the "titi" calls of several birds were heard as they flew about the island, but on our last three nights we only heard two, one and one calls respectively. A waxing moon is offered as a partial explanation for this decline, although Fleming discounts this theory.

The first calls were seldom heard before 8.30 p.m., and sometimes considerably later. This seems to indicate that the first Pycroft's petrels begin to come in to Hen Island fifteen to twenty minutes later than the first Cook's petrels on Little Barrier, where three of us had noted their incoming at exactly the same time of the year. On the evening of January 2, at 8.30 p.m., as some of us were sitting on one of the many huge boulders which protrude above the bush, a Pycroft's petrel nimbly scrambled up beside us, lightly took off and headed out to sea. There are many such boulders about the lower slopes. They offer obvious facilities for landing and taking off, and probably serve as homing beacons to many of the breeding petrels.

The three of us who were familiar with the calls of Cook's petrels on Little Barrier all agreed that the calls of Pycroft's petrel were similar but softer and rather less staccato; nor did we hear the variety of calls of which Cook's petrel is capable. It should, however, be remembered that we heard few Pycroft's compared with the great numbers of Cook's petrels which may be heard on Little Barrier. He would be a bold, not to say rash, ornithologist who would dare to separate the two species by ear. It might be possible after much experience.

Three birds, two of which were incubating eggs, were found in burrows. (a) In a short burrow beneath a huge rock. Egg, 46 x 36 mm. (b) In a derelict-looking burrow, situated on the top of the cliffs, only about 50ft. above sea level. The burrow was about five feet long and doubled back on itself. The entrance was filled with leaves. Egg, 46 x 36 mm. (c) Found by Urquhart above Old Woman Cove, in a shallow burrow, newly excavated. No egg.

Some significant measurements from two other birds were obtained. One (d) was caught while scrambling about the camp one night; the other (e) was found, some time dead, above the tideline.

			Wing.	Culmen.
(a)		••••	219 mm.	24.5  mm.
(b)	•••••		219 mm.	24 mm.
(c)	••••		214  mm.	24 mm.
(d)	******		220 mm.	25 mm.
(e)	*****		214 mm.	23 mm.

Pied Shag (Phalacrocorax varius).—The many small offshore rocks were favourite resting places for both adults and juveniles. There is a breeding colony towards the eastern end of Old Woman Cove. Caughey and Morris visited it and reported that nesting was over, all young seen being full-winged.

White-throated Shag (P. melanoleucos).—At least one was frequenting Old Woman Cove.

Gannet (Moris serrator).—Quite numerous on both crossings; and often fishing in the shallower waters around the island.

Reef Heron (Demigretta sacra).—One was seen in Old Woman Cove.

Harrier (Circus approximans).—These were often playing in the wind currents around the summit cliffs. Up to three were seen at once. some being dark birds of the season. Probably a pair had bred. One was disturbed eating a penguin. On January 5 one was quartering the slopes of Sail Rock.

Caspian Tern (Hydroprogne caspia)—Only one or two birds frequented the island. They favoured Old Woman Cove; but gave no sign of nesting. There is a colony of some size on the mainland opposite among the Mangawai sandhills.

White-fronted Tern (Sterna striata).—None was seen on the way over; and only a few on the way back, near Cape Rodney. None was nesting on the south or west coasts of the island, to which they seemed to be only visitors, a small flock being seen once. In some years hundreds of pairs nest at Mangawai.

Black-backed Gull (Larus dominicanus).—Scarce. As we approached the island two flew out to meet us. A pair in Old Woman Cove did not seem to be nesting. An old nest was found on a beach near the camp.

Red-billed Gull (L. novaehollandiae).—These could often be seen in the wake of passing ships, but they seldom visited the island. Near Sail Rock two followed the Gunner for a while. On the evening of January 2, thirteen, including young birds of the season, came to the beach for fish scraps.

Pigeon (Hemiphaga novaeseelandiae).—The population must have been near saturation point. It has been reported that in lean years, pigeons from Hen Island fly across to the mainland, and many may arrive starving and moribund. The tumbling and diving of pigeons, evidently males displaying, about the steep cliffs of the summit, was a pleasure to watch. Several nests were found containing squabs. In a new nest close by the camp the egg was laid on January 2.

Kaka (Nestor meridionalis).—These noisy and conspicuous birds, often to be seen sporting around the summit, probably appeared more common than they actually were. The island evidently remains a stronghold for the species. No nests could be found.

Red-fronted Parrakeet (Cyanoramphus novaeseelandiae).—Along the coast where there was a strong growth of flax (Phormium tenax) which had had a good season for flowering, many family parties and small flocks were stripping the flax-pods to get at the seeds. The numbers must have run into many hundreds. One nest was found containing four young.

Yellow-fronted Parrakeet (C. auriceps).—A pair and probably a third bird were seen near the camp by Allison, Heather and Morrison; another pair was reported from one of the eastern ridges by Caughey, Heather and Urquhart.

Shining Cuckoo (Chalcites lucidus).—Near the camp one was heard daily and a grey warbler was seen feeding a youngster which had left the nest. None was recorded elsewhere. They are evidently scarce, as would be expected from the small population of grey warblers.

Morepork (Ninox novaeseelandiae).—Regularly heard at night and occasionally disturbed by day, but no nests could be found.

Kingfisher (Halcyon sanctus).—Not a conspicuous bird at all. There were a few pairs around the coast. One nest with young was found.

Pipit (Anthus novaeseelandiae).—The north-west corner of the island was the only suitable habitat that we saw; here a few pairs were breeding and a male in full song was heard.

Grey Warbler (Pseudogerygone igata).—Apparently thinly distributed; and the harder to locate in that they were scarcely singing at all. Their status on Taranga would seem to be much the same as on Little Barrier.

Pied Tit (Petroica toitoi).—At first we thought these were scarce, but as the days went by we found that they were fairly evenly distributed. They were spending most of their time in the treetops. The eastern party thought pied tits were more numerous on the eastern and central ranges. A nest copiously lined with feathers and containing three eggs were found on 31/12/48. Females were seldom seen. The typical "wheedle" song was not often heard.

Pied Fantail (Rhipidura fuliginosa).—Quite common. Some old nests and one with four young ready to fly were found.

Silver-eye (Zosterops lateralis).—Noticeably scarce. Early every morning one or two males were singing vigorously near the camp, and a small flock once passed through. Elsewhere they were encountered only near the light.

Tui (Prosthemadera novaeseelandiae).—Though plentiful enough we gained the impression that the population was not so dense as suggested by Turbott (Emu, Vol. xl., pp. 158-161). The nesting season appeared to be over. No occupied nests could be found and there was little song. However, one which was watched for some considerable time while it attacked or menaced a somewhat unimpressed pigeon, may have still had some territorial interests. Tuis were making the most of the few remaining flowers on the stunted pohutukawas about the summit.

Bellbird (Anthornis melanura).—Certainly more abundant than tui; but hardly, it seemed, as numerous as suggested by Turbott. Song was at a low ebb; and no occupied nests were found. The success or failure of the flowering of the pohutukawa must be an important factor affecting the population of the honey-eaters, especially on the smaller islands of northern New Zealand.

Saddleback (Creadion carunculatus).—To judge by the frequency with which their calls rang out by day, saddlebacks must be distributed fairly evenly over the island. As we followed the shore they could be heard inland from every indentation of the coast; and were even in the gullies of the scrub-clad slopes of the north-west where the vegetation has been considerably modified. The island is probably supporting as many as it can. It was difficult to ascertain exactly what they were doing or to nail any pair down to any particular locality. Two or more often visited the trees where the camp was pitched, and could be seen, indifferent to our presence below, eating the ripening berries of the whauwhaupaku (Nothopanax arboreum). Dr Lamb once saw five together, and noted some feeding on kawakawa (Macropiper excelsum).

By sheer good luck one nest was found. I was climbing a steep slope and reached out with my left hand to a hole in a tree to help myself up. As my hand touched the rim of the hole, out flew a saddle-back, which quietly made itself invisible amongst the tree tops. The neatly-made nest, about nine inches down the hole, held two beautiful eggs, mottled purplish-pink on a white background, one being much paler than the other. A few days later when we visited the nest again, the birds had not deserted. The clutch was still two.

As saddlebacks moved actively about the trees, I was struck by the similarity between their movement and those of the blue-wattled crow. Australian Raven (?).—On January 3, as some of us were watching kakas, harriers, pigeons and tuis sporting in the upward currents or flying out from the steep faces around the summit, a large black bird of corvine appearance, passed along the line of high inland cliffs. Being familiar with ravens in Europe, I had no doubt that this was a large member of the corvidae. What may have been the same bird was reported in October, 1945, from Mokohinau by Major Buddle (O.S.N.Z., Vol. ii., p 70) and from Little Barrier by Turbott (O.S.N.Z., Vol. ii, p. 106). This trans-Tasman straggler, if that is what it is, should not find it hard to survive on these islands.

#### INTRODUCED BIRDS.

Song Thrush (Turdus ericetorum).—Occasional snatches of song were heard from the few which have colonised the island. They were shy and elusive.

Blackbird (T. merula).—Rarely seen, but occasionally singing even as late as January 5. Around Auckland most blackbird song has ceased before Christmas. On Little Barrier and Hen Island the small blackbird populations continue singing about a fortnight later. A nest near the camp contained two eggs. It may have been our arrival that caused the birds to desert. Another nest (old) was found some way inland,

Hedge Sparrow (Prunella modularis).—This species had not previously been recorded from Hen Island. We found it among the scrub on the north-western slopes.

Starling (Sturnus vulgaris).—Though an alert lookout was kept, only one was seen.

# PIED FANTAILS.

# By C. A. Fleming, Wellington.

The New Zealand fantails are an example of valid subspecies differing in quite minor details of plumage pattern. Recently, I have had occasion to re-examine the differences between fantails from North, South and Chatham Islands, and prepared the accompanying sketches to show the characteristic tail pattern of each of the three races, which are a good introduction to the phenomenon of geographic sub-species in a common bird which most observers know and recognise throughout the country as the pied fantail, without thought of the characters that distinguish birds on either side of Cook Strait.

New Zealand fantails are races of a species which ranges throughout Australia and in Tasmania, Norfolk, Lord Howe, New Hebrides, New Caledonia, Banks and the Solomon Islands, and, although the species bears the name given by Sparrman to a black fantail collected in New Zealand during Cook's second voyage, it is probable that it had its origin in Australia and has spread outwards quite lately (but in prehistoric time) to its Pacific outposts (including New Zealand) where the separate races arose in isolation.

Black fantails are common in the South and rather rare in the North Island. For many years they were considered a different species from the pied fantail, but in both islands they interbreed freely with pied kirds, so that modern students of bird classification consider the black birds to belong to the same species and sub-species as the pied fantails they live with, and no more worthy of a separate scientific name than are black rabbits or blue budgerigars. How the North and South Island