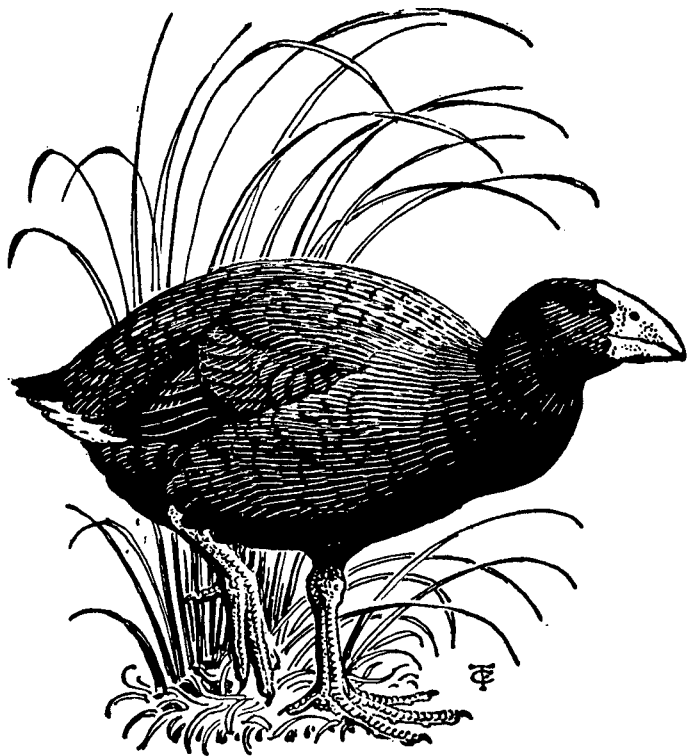


NOTORNIS

*Quarterly Bulletin of
The Ornithological Society of New Zealand*



Volume Six, Number Seven : January 1956

NOTORNIS

In continuation of New Zealand Bird Notes

BULLETIN OF THE ORNITHOLOGICAL SOCIETY OF NEW ZEALAND
(Incorporated)

Registered with the G.P.O., Wellington, as a Magazine

Edited by R. B. SIBSON, King's College, Auckland S.E.7

Annual Subscription, 7/6 (Juniors, 5/-); Endowment Membership, 10/-;
Life Membership, £6/6/-

OFFICERS, 1955 - 56

President—MR H. R. MCKENZIE, Clevedon.

North Island Vice-President—MR P. C. BULL, Lower Hutt.

South Island Vice-President—MRS L. E. WALKER, Dunedin.

Editor—MR R. B. SIBSON, King's College, Auckland S.E.7.

Treasurer—MISS N. MACDONALD, 'Keppoch Lodge', Sale Street,
Howick, Auckland.

Secretary (acting)—MR E. G. TURBOTT, War Memorial Museum,
Auckland.

MRS O. SANSOM, Invercargill; DR R. A. FALLA, Wellington.

Contents of Volume 6, Number 7 : January 1956

	Page
Initial Banding of <i>Notornis mantelli</i> 1952 — Thane Riney and K. Miers	181
Black-fronted Dotterel near Palmerston North — Ian G. Andrew	185
Bulbuls in Auckland — E. G. Turbott	185
Classified Summarised Notes	193
Annual Locality Reports: (1) Firth of Thames. (2) Manukau Harbour	212
Unusual Case of Albinism in a Blackbird — D. H. Brathwaite	217
Review	218
Notices	220

Illustrations:

Takahe — two photographs and map

Bulbul

Albino Blackbird

Centre of
Bulletin

NOTORNIS

VOLUME SIX, NUMBER SEVEN : JANUARY NINETEEN FIFTY-SIX

INITIAL BANDING OF NOTORNIS MANTELLI, 1952

By THANE RINEY, N.Z. Forest Service, and K. MIERS, Wildlife Division,
Department of Internal Affairs

Introduction

The following notes record the initial colour banding of the Takahe (*Notornis mantelli*), the first few sight records of banded birds and a diurnal movement of one pair. Through banding it is possible to learn something of the size and the shape of the area occupied by individual birds and of the variation of the mobility between Takahe of different sex and age groups. In addition banding should contribute significantly to the development of techniques for comparing relative densities of Takahe, either in the Notornis valley or in similar Fiordland areas. By comparing sizes and shapes of individual or family ranges on a yearly or seasonal basis, the nature of the necessary requirements for the existence of the Takahe should be further elucidated. Also needed are: reliable facts about the Takahe family organization, not only on the nesting grounds but on a seasonal basis, the age at first breeding, the number of broods per year, growth measurements and some indication of the longevity of the bird. The gathering of this and similar information on the natural history of *Notornis* should be greatly accelerated by an intimate knowledge of even a few banded individuals recognizable in the field.

Acknowledgements

Banding was accomplished between 24 and 31 December 1952 by the second of three parties to visit the valley in the 1952 summer season. This party consisted of Prof. Percival, Canterbury University College, and the present authors. Grateful acknowledgement is made to Mr P. C. Bull, Dr R. A. Falla and Mr F. Newcombe for help in obtaining the bands, and to Mr V. Stout for preparation of the map from a series of oblique aerial photographs, and high altitude photographs from the ridges north and south of the valley.

Materials

Bands used were of the type commonly used in ringing poultry, and consisted of celluloid bands of two types, both with an inside diameter of 18mm. (see figure 1). Most of the bands were of a spiral type 11mm. wide and with three complete turns. The other type was a 'flatband' ring, with an overlap of four-fifths of the circumference of the ring. Since the spiral type ring appeared more secure on the leg than the 'flatband' ring, the latter were used only when needed to fill in on a colour combination for which spiral rings were lacking. Colours used were green, yellow, blue, and black.

Methods

Different colour combinations were observed in poor light inside the bush canopy in the late afternoon and those most easily identified were selected. Of these, blue was chosen as the colour to represent the 1952-1953 banding season because of a plentiful supply. By using the blue ring as the bottom ring on either one leg or the other and adding other colours as necessary, each bird was thus given an individual colour band marking. Unfortunately

we were unable to procure serially numbered aluminium leg bands for this season.

The exact method of capture depended upon the location of the bird when first observed, on the type of habitat in which it occurred and on the number of observers available for capturing the bird. The young had hatched at the time the initial banding operations occurred and at this time, with small chicks about, little difficulty was experienced in capturing adult Takahe. By keeping between the Takahe and the bush or scrub it was possible to drift the birds into low tussock or clearings where they were readily captured after a short chase. The parent birds hide the chicks in the snowgrass or shrubs at the first sign of disturbance, and finding a chick once hidden proved difficult. Capture of the second chick (No. 4) was greatly facilitated by first watching from a distance, then keeping the adults and chick in sight as a slow approach was made. In this way the adults were seen to hide the chick at the base of a hebe, before moving away. Once a chick is captured the adults come close enough so that they are more readily captured than when encountered on their own. Three adult birds were captured from the nest; in two cases the mate occupied the nest-bowl and continued incubating.

While being banded the Takahe was held by an observer with its head under his arm to reduce the danger of nips from the powerful beak. The birds, for the most part, proved tractable in the hand and offered no serious objection while a systematic search was made by the observer for ectoparasites on the skin and feathers (see fig. 1).

Results

Nine Takahe (two chicks, seven adults) were banded between 24 and 31 December. Colour combinations are shown in table 1, and the location of banded birds is indicated in figure 2.

Banded birds were observed as they were released from the original banding location and on seven occasions subsequent observations were made. Observations of leg bands were easiest made when it was possible to drift the bird from shrub or high *Danthonia* into grassy clearings where the bands could be easily observed. In the field a special effort was made to see the complete colour combination on both legs. Observations were recorded immediately even when they were not complete, for even incomplete observations can sometimes be definitely assigned to an individual bird, provided the key information is observed.

Preliminary observations in December indicate that Takahe adults, after the chicks are hatched, may, at least in certain habitat, range within a few days over an area $\frac{1}{4}$ to $\frac{1}{2}$ mile in one direction. For example, one bird (No. 6) was recaptured 300 yards west of the site of banding. Another bird (No. 7) was identified well over a quarter of a mile from its banding site, across the valley and inside the edge of the bush. Under the dull shady conditions that prevailed where the latter bird was collected, the blue band showed up well, in fact much better than the black band. Two months after the birds were banded E. G. Turbott and party observed two banded adults (Nos. 7 and 9) and one chick (No. 1), all within a quarter-mile of the spot where they were originally banded.

In the present writers' opinion it is important to learn the shape of the home range. This knowledge should facilitate the selection of common environmental elements from a variety of home-range shapes and in this way contribute to an understanding of Takahe environmental requirements. However, in future work in determining home ranges great care will have to be used in order not to over-emphasize the importance of grassland and to include maximum movement in scrub and in bush as well. In this connection it would probably greatly accelerate learning if some kind of foot marking or toe clipping could be used to mark the tracks, or if a satisfactory bait could be found for use in dyeing the pellets.

Another kind of evidence of the nature of the size and shape of the area occupied by Takahe can be gathered by continuous observation of undisturbed

individuals for daily periods. One example of such an observation is here recorded for one pair with a chick. Figure 3 shows the route taken by this pair (Pair A) over the 16 hour 15 minute period of 26 December (4.45 a.m. to 9.30 p.m.). As can be seen from the figure, the route taken by these three Takahe was a meandering one, into the edge of the hebe, on again into the snowgrass. During this period the birds were initially disturbed at 9 a.m. by an observer, but this disturbance did not cause them radically to shift their range. They were disturbed again at 3.20 p.m. by a male paradise duck who made a series of warning calls as an observer approached the area in which the Takahe were feeding. But the birds did not shift at this time, although one of them was seen to look in the direction of the human. Between 4.30 p.m. and 6.30 p.m. the family group had been alternately resting and feeding, but in a very restricted area. At 6.35 p.m. they started feeding in a westerly direction at a rate of somewhat less than 50 yards per hour. This was the most rapid undisturbed movement recorded in the day. As they moved, occasionally all three birds could be seen at the same time, and when this was possible it was observed that they were normally not over about 10 feet from each other when they were moving steadily in one direction. When watched for several hours, movements incidental to feeding were characteristically meandering movements. Meandering about the central line of movement varied during the day, from about three yards to a maximum of about 50 yards. This group roosted in the edge of the scrub about 25 yards from the site where they were last seen on a previous day. The following morning at five o'clock this family group was observed in the same small patch of scrub. A day later this same group roosted about 200 yards from the roosting site of the previous day. The overall distance covered by Pair A on 26 December was paced at 375 yards, although the actual distance travelled would be more than double this distance due to the meanderings of the group.

Disturbance behaviour

Attempts were made on several occasions to determine the minimum distance at which Takahe would tolerate the presence of man. Although considerable variation occurred, it was observed that this distance was about 20 yards when in clearing, and when in snowgrass it was 10 to 15 feet. As an observer approached the location of a chick the minimum of toleration greatly decreased as the parent birds became increasingly concerned for their chicks. Parents of chick No. 4, for example, approached to within five feet of the observers banding the chick.

Distraction display, instead of manifesting itself in simulated broken wing or other mock crippled behaviour, takes the form of a slow deliberate pacing in full view of the intruder. One of these birds was thus followed slowly about 50 yards before the adult ducked behind a clump of tussock and quickly doubled back in the direction from which both of us had come.

It was found that the Takahe, when pressed, tired quickly and would turn and double back or circle. On one occasion an adult suddenly stopped in full flight and hid its head and neck in the snowgrass although the rest of the body was fully exposed to view. This bird was, of course, easily caught for banding.

As an example of a more typical chase, an adult was flushed from beneath a hebe and dashed away fast towards the river. After about 15 yards it tried out-maneuvring its pursuer around the bases of the snowgrass and then kept within a circle of about 20 feet until it was caught.

On one occasion when chased a bird was seen to run into the stream and swim rapidly under a large overhanging tussock growing on the bank. It was collected in the water. This was the only example observed this season in which a Takahe voluntarily took to water.

Calls observed associated with banding activities were of three types, although there may prove to be several others.

- 1) A single loud squawk was made by several birds when first caught.

2) Soft distress cries were made by one bird (No. 2) as it was handled. This brought another bird (a larger, slightly more brightly coloured, more wary bird, presumed to be the male) from a distance of about 25 yards to within 40 or 50 feet. No. 2 was typical of the other adults handled in that it kicked a bit when first picked up but was not at all vicious to handle.

3) The normal contact call used when feeding in an entirely undisturbed condition is noticeably louder (oomph). It is somewhat more frequent when the bird is disturbed. These calls, although of the same general nature as the contact calls, had the effect of alerting other Takahe.

SUMMARY

Seven adult Takahe and two chicks were banded with coloured poultry type rings. Preliminary notes in the first few days following banding indicated movement up to a quarter-mile from the original tagging site. Three observations of banded birds two months after banding were made in the same general areas used by these birds at the time of banding. Daily movements were recorded for one pair, the overall distance covered in a 16 hour 15 minute period being 375 yards. Roosting of one pair with chick was observed both in the same locality on two successive nights, and on two other nights the same birds roosted in different localities. Several aspects of the disturbance behaviour were described.

Table I
Colour combinations of banded *Notornis*

Date Dec., 1952	Map Number	Colour Combination		Age	
		Left	Right	Chick	Adult
24	1	0	0	x	
		B	0		
	2	0	0		x
		0	B		
26	3	Y	0		x
		B	0		
27	4	0	Y	x	
		0	B		
29	5	G	0		x
		B	0		
	6	0	G		x
		0	B		
30	7	Bk	0		x
		B	0		
	8	0	Bk		x
		0	B		
31	9	W	0		x
		B	0		

G green, Y yellow, B blue, Bk black.

BLACK-FRONTED DOTTEREL (*C. melanops*) NEAR PALMERSTON NORTH

By IAN G. ANDREW

On 25/8/55 I saw a Black-fronted Dotterel (*Charadrius melanops*) at Longburn, where it was feeding in a small paddock by the Manawatu River.

I watched the bird for fifty minutes at a distance of 22 yards, through a telescope of 15x, with a tree trunk as rest. There was bright sunshine coming from behind me. The dotterel moved within a radius of only a few yards and permitted views from all angles. I identified it almost immediately from memory of the description given by D. H. Brathwaite in the account of the first record of the species for New Zealand (*Notornis*, 6, p. 146). I took down notes on the spot, observing it from 10.30 a.m. to 11.20 a.m., and on returning home I found that the complete description and some of its actions tallied exactly with those given by Mr Brathwaite for the Napier bird. I also noted, when it raised its wings, that the underwing was white with black expanses on the wing tips. Sometimes the dotterel bobbed its head vigorously, but much of the time it remained still. At 11.30 a.m. it flew up and circled around, calling, and landed nearby but out of sight, and I did not follow. In flight it seemed to have a quicker downstroke of its wings than does a Banded Dotterel (*C. binctus*), with which I am familiar, and its call note was a sharp 'tink, tink' of a considerably higher pitch than that of a Banded Dotterel.

[Field notes and sketches made on the spot were submitted by I.G.A. and leave no doubt about the correctness of the identification.—Ed.]

BULBULS IN AUCKLAND

By E. G. TURBOTT, Auckland Museum

The following are notes to date on the distribution of the red-vented bulbul, *Pycnonotus cafer* (Linn.), in the Auckland city area. The introduction of this species by some unknown means appears to have been made in about 1952, but it was not until 1954 that its establishment at several points in the suburbs of Auckland was recognised. Efforts under the control of the New Zealand Department of Agriculture are in progress to exterminate bulbuls at these points of establishment and, as the species is present in only small numbers, its future is still doubtful.

General — Distribution and Field Characters

The red-vented bulbul (also termed 'common bulbul' in older works) is widely distributed in Asia — throughout India, from the extreme North-west, and the Himalayas, to southern India and Ceylon; and to the east as far as eastern Burma.* It has been introduced into Fiji, where it is now common.

This species is also probably established in Melbourne, according to Lendon (1952), who says that: 'It has been stated on occasions that bulbuls have become established in the suburbs of Melbourne, and it has generally been assumed that the species in question is the red-whiskered bulbul (*Otocompsa emeria*), which is common around Sydney.' Lendon records a single observation of a red-vented bulbul, which he saw closely in a garden in Melbourne in October 1942, and the presence of a skin in the South

*This is the range of *P. cafer* according to the recent revision by Deignan (1949), but other authors include under *P. cafer* the bulbuls with under tail-coverts yellowish and light grey, extending to China and Java (Delacour, 1943).

Australian Museum collected in Toorak, Victoria, in 1918 (Toorak is a suburb in Melbourne).*

The red-whiskered bulbul, *Otocompsa emeria* (Linn.), also from India, differs from the present species in having white underparts and a white patch on the cheeks; there is a tuft of crimson on the face below the eye, as well as the crimson patch under the tail; and the crest is taller. As mentioned by Lendon, the red-whiskered bulbul is now common in Sydney and the surrounding suburbs.

Field recognition. The red-vented bulbul is about the same size as the song thrush, *Turdus ericetorum* Turt., or the starling, *Sturnus vulgaris* Linn., but it is slimmer in build and has a longer tail. The sexes are alike in plumage. The length is 8 to 8½ inches.

The *crimson patch under the tail* immediately distinguishes it, but this sometimes cannot be seen easily. Most informants have noticed the *triangular crest* ('like a Roman helmet'), and this is certainly an important field character if seen quickly, or at a distance. The *head and throat are glossy black*, the remainder of the body greyish brown, and the tail darker brown at the base, darkening until almost black towards the tip. In flight there is a *conspicuous white band across the rump*. The *tips of the tail feathers are white*, forming a narrow white band which is seen in flight, or upon close observation.

The bulbul is an active, restless bird, although observations made in Auckland suggest that long rest and preening periods are spent between bursts of activity. Its flight is generally strong and direct, but sometimes noisy and apparently laboured. There is some resemblance in all these habits to the bellbird, *Anthornis melanura* (Sparrm.), and the bulbul is, in fact, very similar in shape of bill (narrow and slightly curved) and in general proportions to this honeyeater.

The most common call note heard in Auckland has been a low, scratchy double croak, 'cark-cark', although the birds observed have also delivered single notes of more musical quality, but not a full song. Whistler (1949) describes its voice as 'cheerful and attractive', but it has 'only one or two call-notes and no song'.

Following press reports, informants described several other birds in mistake for the bulbul, and especially the Indian myna, *Acridotheres tristis* (Linn.), which is increasing in the Auckland city area. Fortunately the white wing-patches of the myna show prominently, even at some distance, and readily distinguish it from the bulbul in flight.

Record of Appearance in Auckland and Control Measures

The first record of the bulbul in Auckland was apparently made by Dr O. F. Lamb, although the identity of the bird was at that time uncertain. In early October, 1952, Dr Lamb informed me that he had seen a strange bird in the garden of his home at 99 Remuera Road. The suburb is about 2½ miles from the centre of the city, and gardens are mainly well established with plentiful trees and shrubs.

The bird was described in detail by Dr Lamb, who especially noted the crimson under tail-covers, and the black head with crest. One of these birds was heard and seen by Dr Lamb in a neighbouring garden a week later, and between these two occurrences Dr Lamb heard of one which had been seen at Stanley Bay (a North Shore suburb) by Miss Hodder, who noticed the crimson under tail-coverts. I suggested that the birds were probably bulbuls. It seemed possible at this time that the birds might be stray cage-birds, although I could find no evidence that any bulbuls had recently been kept in captivity. This would, in any case, have been illegal.

I have since received the three reports following for the winter and spring of 1954, partly owing to publicity when bulbuls were found nesting at Stanley

*This skin is definitely *P. cafer* (A. Lendon in litt.).

Bay in December 1954. On 5 August 1954 Mr F. Reekie got in touch with the Auckland Museum to say that two strange birds had been seen in his garden (Atanga Avenue, Mt Eden district – about two miles from Remuera and $3\frac{1}{2}$ miles from the centre of the city) for some weeks feeding on the fruits of the wild lily *Caladium*. This was while I was on leave overseas from the Museum, and the birds were identified tentatively as bulbuls by Mr P. J. O'Brien of the Museum staff, who is familiar with the red-whiskered bulbul in Sydney. Mr O'Brien communicated with Messrs J. C. Davenport and R. B. Sibson, who visited Mr Reekie but did not see the birds. However, Mr Reekie identified them from books of coloured plates as red-vented, and not red-whiskered, bulbuls. Mr Reekie has since informed me that the birds were present from mid-July to the first week in September, 1954, but went away when the *Caladium* fruits were no longer available. They were seen feeding on the fruits at least twice a day, and disappeared between feeding into the trees. Mr Reekie described the call as a 'coarse croak' and said their flight was strong. Subsequently, one or more bulbuls were reported by Mr A. W. Jarman at Disraeli Street, Mt Eden – only about half a mile from Mr Reekie's property at Atanga Avenue. These were reported in January, 1955, and, as Mr Jarman had observed them at intervals since about September 1954, were probably the birds which had been visiting Mr Reekie's property.

In addition, Dr Lamb heard from Mrs J. M. Frater, 63 Seaview Road, Remuera, who saw one at this address between July and September, 1954, i.e. while Mr Reekie had been observing the birds regularly at Mt Eden.

Bulbuls were thus present in two localities in the city area (Mt Eden and Remuera), and on the North Shore (Stanley Bay), during the above period 1952-1954.

On 13 December 1954, Mrs A. G. Fisher described to me over the telephone two birds which she had seen several times at the edge of the Stanley Bay Park. These from her description were evidently red-vented bulbuls. I visited this spot on the same day and was taken by Mr S. R. Mainland, the park caretaker, to a single low *Pinus radiata* at the edge of the park where the birds had been observed. We shortly afterwards saw one come into the tree, and following the movements of the bird found the nest. It was situated about nine feet from the ground near the end of a branch, amongst branchlets and cones, but was clearly visible from the path beneath. The children's playground and paths adjacent to the tree are constantly used. The bird went on to the nest, which later proved to contain three eggs.

The collecting of these two birds at Stanley Bay, and the nest and eggs, provided the first specimens from Auckland since the bulbul was reported. Both birds collected were females in breeding condition; the eggs proved to be fresh, and except for the extremely remote possibility that they were laid by an unmated hen bird, it was to be expected that the males of the two pairs were still in the neighbourhood. A close watch was kept by Mr Mainland during the following period, but nothing further was reported of the birds from this area until 10 August 1955. On that date a schoolboy, W. Hornsby, saw a bulbul in the Stanley Bay district close to this area.

Further observation on these two bulbuls at Stanley Bay are of some interest. Both specimens were shot in the tree which contained the nest, two birds being seen in the tree together, and then the first being obtained when it returned alone shortly afterwards. The second bird was killed when it came to the tree some two hours later. The interest shown by the two females in the same tree is of some note, suggesting perhaps a degree of gregariousness even during the nesting season. (Whistler, 1949, notes that: 'Occasionally small parties . . . are met with, and numbers often collect together at a spot where some particular food is plentiful or for the purpose of roosting; but normally the bird cannot be described as gregarious'.) During my observations with Mr Mainland, the sitting bird had flown several times to trees some 100 yards away, and both birds flew together to the same

trees later. (Information on the food taken is given below.) It seems likely from the above observations that the males are more wary than the females.

It was at this stage that measures for control were instituted by the Departments of Agriculture and of Internal Affairs. The introduction or importation into New Zealand of this species is illegal under the Stock Amendment Act 1952, administered by the Department of Agriculture. A committee, under Mr J. C. Cooper (Agriculture Department) as convener, was set up to attempt to search for and destroy the birds which were established at various points. A joint statement to the press by the Ministers of Agriculture and of Internal Affairs was also made in order to point out the 'dangers of establishment of a bird of this nature and of the harm which persons can do in trying to evade the law regarding importations'. Measures for the destruction of the birds were the responsibility of the Department of Agriculture, but this has proved difficult in view of the suburban type of habitat in which the birds occur. It is difficult to trace the birds under such conditions, both on account of the frequently abundant cover and passage through private property.

Special press publicity and the screening of coloured slides of the bulbul in picture theatres was arranged, and the public were requested to report any bulbuls seen. It seems probable that, in view of the wide publicity, and the ease with which the bird is recognised, it is established at only the relatively few points from which it has been recorded to date.

The first report after the press account of the birds found at Stanley Bay was on the following day (14 December 1954). Mr R. Crawshaw, of 31 Balmoral Road (Mt Eden district), saw a bulbul on a telegraph wire near his house, noting its crest, but not the crimson under tail-coverts.

Early in January 1955, Mr A. W. Jarman, of Disraeli Street (also Mt Eden district), reported that bulbuls had been seen since September 1954, as mentioned above. On 15 January 1955 I visited Mr Jarman's property, which is adjacent to the Auckland City Council playing fields and reserve in Windmill Road. This includes a grove of tall pines and other trees, backing on to gardens planted in well-grown trees and shrubs. I saw one bulbul soon after I arrived, and later saw one which remained preening on a high branch for some time, apparently a different bird. On 17 January, in the same area, I again saw a bulbul which appeared close at hand after the delivery of the alarm note by a blackbird disturbed by a cat. On 18 January I visited the area with officers of the Department of Agriculture, and bulbuls were again seen both in the reserve and in adjacent gardens, including two seen close together by Mr J. C. Cooper. An immature male was obtained in this area on 9 April 1955 (No. AV. 1337.7), and an adult female on 17 April 1955 (No. AV. 1337.8). Previously (c. 1 March) another adult had been shot, but the specimen was not retained. Observations in April suggested that there were still at least two (probably an adult and an immature) in this area, but nothing has been seen of them since the last specimen was obtained (17 April).

Further information was received shortly after Mr Jarman's, when on 20 January 1955 bulbuls were reported on Mr R. H. Exton's property, at 66 Seaview Road, Remuera. (This is close to the point where Mrs Frater saw one in July-September 1954.) On 20 January I watched an adult and young bird, which begged for food from the parent. Mr and Mrs Exton had seen them several times since August 1954 and the birds had evidently moved about at least for a short distance in the neighbourhood. Officers of the Department of Agriculture were able to destroy the adult male and female, and the young, here on 21 January (Nos. AV. 1337.4-6).

No further reports were received until 11 May 1955, when Mrs I. Dickson, of 3 Clifton Road, Takapuna, informed me by telephone that four or five adult bulbuls had been seen recently in the garden, and gave a detailed description. This locality is about three miles from the centre of the city and two miles from the suburb of Stanley Bay. It is at the edge of a large

area of cliff vegetation and extensive properties planted in trees and shrubs, and faces Rangitoto Channel and the harbour entrance. On 15 May I failed to see any bulbuls on a visit to the area, but one was destroyed on the nearby property of Mr S. Reid by an officer of the Department of Agriculture on 24 June 1955. This (No. AV. 1337.9) was an adult male. Up to three bulbuls have since been seen at fairly regular intervals in Mrs Dickson's garden. Mrs Dickson also mentioned that, several weeks before the first report appeared of the Stanley Bay occurrence (13 December 1954) she saw about twelve strange birds together in a tree close to the cliff edge, and noticed especially their noisy, harsh (or 'parrot-like') calls. Since observing bulbuls more closely she is sure this was the same call.

Amongst a number of reports of birds thought to be bulbuls, soon after the press account of the birds at Stanley Bay, were two from (a) Avondale (about $5\frac{1}{2}$ miles from the centre of the city); and (b) Grafton Road (central area). Both reports mentioned the crest but not the crimson under tail-coverts. They have not been substantiated by any further reports, and can only be regarded as doubtful records.

In addition, there have been more recent sight records which are considered reliable from Birkenhead and Northcote, closely adjacent suburbs on the North Shore, some two miles from Stanley Bay and three miles from Takapuna. These reports are still under investigation.

Briefly summarising the above, it seems possible that only two males remain in the Stanley Bay district, and that in the Remuera district the birds have been eliminated. However, reports as early as 1952 suggest that breeding could have occurred and thus produced a breeding stock in both these districts. In the Mt Eden district one young and one adult probably remain, while there is an unknown population, almost certainly capable of breeding, at Takapuna. There is probably a centre (with a population of unknown size) at Birkenhead-Northcote. Little is known of the extent to which the birds have wandered afield from these centres, but the reports suggest that they have remained in the Stanley Bay and Remuera areas for several years. It may be added that according to Whistler (1949) it is a 'strictly resident' species.

Origin

The most likely means by which the birds reached Auckland seems to have been a liberation of cage-birds. Since permission has not been granted to import this species or keep it in captivity since as early as 1934 (information from the Department of Internal Affairs), the release was probably made upon arrival of the birds in port. This species is apparently a popular cage-bird in Eastern ports, although as far as I can discover it is not kept in captivity, or trapped, in Fiji. Various species of bulbul travel to New Zealand as pets in overseas ships from time to time, but in this case the port authorities can make provision for the birds to be retained under bond while in port.

It seems possible that the birds which appeared in Auckland were brought from some eastern port, apparently in 1952. They could well have been released in the harbour before the Customs inspection was made at the port.

It is thus of some interest that, shortly after the description of the birds at Stanley Bay appeared in the press, I heard of an earlier liberation of the red-vented bulbul in Auckland. However, it seems extremely unlikely (in view of the lack of any subsequent records over a long period) that it was established on this occasion, and this incident is of interest mainly as suggesting the means by which it has probably now reached New Zealand. An informant said that in 1934 some six bulbuls were brought to Auckland in a ship calling at Abadan, in the Persian Gulf. Members of the crew purchased the birds from Arab bird dealers, but on arrival in Auckland were informed by port officials that the birds must be destroyed. However, they were taken ashore at Devonport (on the North Shore), but shortly afterwards were accidentally released from their cages. The identity of the birds was checked by my informant, who recognised Museum specimens imme-

diately as the same kind as those brought from Abadan. (As the range of this species does not extend to Persia and Iraq, the birds must have been transferred to Abadan as cage-birds.)

The Department of Agriculture has recently taken measures to make a special check of vessels arriving at Auckland from Asiatic ports and from Australia and Fiji, and has asked shipping companies to co-operate in preventing 'illegal importations of birds and other animals'.

There is also some slightly possibility that the birds could have been transported by a tropical cyclone from Fiji. I am thus grateful to Mr R. Moir, of the Auckland weather office, for the information that during 1952 there were no exceptionally high winds in this area likely to have carried the birds to New Zealand. Mr Moir has also informed me that tropical cyclones which reach New Zealand generally travel farther to the westward through New Caledonia and Norfolk Island, and would thus be unlikely to bring birds from Fiji to New Zealand.

Food

The bulbul is a bird of mixed diet, and as in the case of other such species has tended to be regarded either as beneficial on the whole, or as an unqualified pest. There seems to be little doubt that it is capable of doing serious harm to fruit and vegetable crops, and for this reason special measures were taken to prevent its entry into New Zealand.

In India, according to Whistler (1949), it is 'apt to be destructive in the garden, damaging fruit and flowers and spoiling many a promising row of peas; though the unseen good that he does in the way of keeping down insect pests probably outweighs this more obvious damage'. An early opinion from Fiji stated that it was 'largely insectivorous, and eats larvae of many varieties' (Wood and Wetmore, 1925-26). However, Turbet (1938-39) says that in Fiji its 'harmfulness to ripe fruit weighs the balance against it'.

The stomachs of the birds obtained to date in Auckland have been sent for examination to Miss Ruth Mason, of the Botany Division, D.S.I.R., and Mr L. Gurr, of the Entomological Research Station, Cawthron Institute. I am indebted to Miss Mason and Mr Gurr for the following particularly detailed and helpful report. The material includes both fruit and insects and is of interest in confirming the kind of food taken. The amount of material for analysis is much too small for the importance of different foods to be assessed.

- (1) AV. 1337.1. Stanley Bay, 13/12/54 (adult female - sitting on the nest).
 - (a) Remains of seven native burrowing bees (*Paracolletes* sp.).
 - (b) Remains of four European wasps (*Vespula germanica*).
 - (c) Fragments of the skin and flesh of a soft fruit, probably some kind of plum.

Note. The bees burrow in clay banks, and were probably near a wasps' nest, so that they would be captured together.
- (2) AV. 1337.3. Stanley Bay, 13/12/54 (adult female). The stomach of this specimen was empty.
- (3) AV. 1337.4. Remuera, 21/1/55 (adult male).
 - (a) Seed and skin of fruit of *Solanum auriculatum*. (This grows into a moderately large tree, and is common on waste areas in Auckland.)
 - (b) Fragments of fruit of *Ficus* sp. The species is uncertain as there was so little material - not *Ficus macrophylla* (Moreton Bay fig).
 - (c) Insect fragments.
- (4) A.V. 1337.5. Remuera, 21/1/55 (adult female). Seed and skin of fruit of *Solanum auriculatum*.
- (5) A.V. 1337.6. Remuera, 21/1/55 (immature female). Stomach empty.
- (6) AV. 1337.7. Mt Eden, 9/4/55 (immature male). Unidentified seeds.
- (7) AV. 1337.8. Mt Eden, 17/4/55 (adult female). Skin of apple. Also a little fragmentary material.

(8) AV. 1337.9. Takapuna, 24/6/55 (adult male). Two fruits of *Eleagnus* sp. in stomach and intestine, and a few unidentified fragments.

A few field observations have also been made relating to feeding habits. As mentioned above, in 1954 Mr F. Reekie saw two bulbuls feeding regularly on *Caladium* fruits at Mt Eden from July to September. I observed a bulbul which chased and apparently caught a large cicada (*Melampsalta cingulata*) at Windmill Road reserve in January 1955. In March 1955 information was received from Constable A. W. Reid, who has carefully observed the birds, that one had been seen eating grapes in a garden beside the reserve.

The following notes on the feeding habits of this species in Fiji are also of interest. According to Mr E. F. Dodson, bulbuls were seen regularly at the Meteorological Office, Suva, in 1943, obtaining insects from gauze screens placed over the windows. Large numbers of insects were attracted to the screens by the light and the birds were seen only at dawn, presumably while the insects were still flying actively about the screens. A schoolboy, M. W. Pietriche, has also observed this species in Fiji; it is common, and has been known to enter houses to take fruit off a table; it will also fight with the Indian myna, and bulbuls are frequently seen being chased by mynas.

Identification and Plumage Changes

The Auckland specimens have chocolate brown ear-coverts and wholly black head, hind neck and throat. They evidently thus belong to the East Himalayan subspecies, *P. c. pygaeus* (Hodgson, 1844) (= *bengalensis* Blyth). Whistler (1949) states that this subspecies occurs in the eastern Himalayas from Nepal to Assam, up to about 4500 feet. It also has a wide distribution in the plains: 'through the Eastern United Provinces, Northern Bihar, Eastern Bengal, up to North-west Cachar and Eastern Assam'. According to Mayr (1945) and Deignan (1949) the red-vented bulbul introduced into Fiji is *pygaeus* (= *bengalensis*).

The following notes on the specimens obtained to date give some indication of seasonal plumage changes. Two immature specimens are included in the series.

AV. 1337.1. Adult female; Stanley Bay; 13 December 1954.

AV. 1337.3. " " " " " " " "

Both of the above specimens are in fairly good plumage, but the wings and back are brownish and the feathers worn; the white tip of the tail is much worn.

AV. 1337.4. Adult male; Remuera; 21 January 1954.

AV. 1337.5. Adult female; " " " " "

Both specimens are faded, and the feathers much worn including the white rump feathers; only a trace of white at tips of tail feathers owing to wear. However, moult has already begun in the adult female (A.V. 1337.5), which has two new tail quills of almost full length.

The active condition of the gonads suggested that this pair, which were accompanied by a well-grown young, would have nested for a second time.

In these adult specimens, obtained in December and January, there is little or no wavy or scaled appearance on the back, owing to abrasion; but some of the black feathers have whitish tips on the breast.

AV. 1337.6. Immature female; Remuera; 21 January 1955.

This bird had probably not long left the nest. The head and throat are dark brown; tail feathers dark brown with brownish-buff tips; wing coverts and secondaries edged with brownish-buff. The back is brown, underparts below the dark throat greyish-brown, and the rump greyish-white. The under-tail coverts are a faintly pinkish buff. Length of bill (culmen), 13mm; wing, 87mm.

AV. 1337.7. Immature male; Mt Eden; 9 April 1955.

A good deal more advanced than No. AV. 1337.6, with new feathers appearing

on the crown, and the throat and breast; those on the crown are dark brown, but on throat and breast the feathers are jet black like the adult; white tips on breast. New feathers with crescentic white tips on wing coverts, but not on mantle. Secondaries still edged with brownish-buff; primaries growing. Tail longer than in AV. 1337.6, but with faint brownish-buff tips. Nearly all the white rump feathers have been moulted. The under tail-coverts are buff with a strong tinge of pinkish.

AV. 1337.8. *Adult female; Mt Eden; 17 April 1955.*

A bird in full moult, with sprouting feathers on almost all parts of the body, except the rump on which the white feathers are fully developed. Tail quills of uneven length, only two of full length. Crimson under tail-coverts also growing. Crown and throat almost bare, with sprouting feathers. The gonads were inactive.

AV. 1337.9. *Adult male; Takapuna; 24 June 1955.*

Moult is complete in this specimen, which is in fine fresh plumage. There are whitish crescents on the feathers of the wing coverts and upper back, and on the black feathers of the breast, 'giving a scaled appearance' (Whistler).

In this specimen abdominal fat was particularly well developed, but only a small amount was present in the previous specimens. Gonads inactive.

Measurements (in millimetres). Two adult males: bill 19.4, 19.5; wing 101, 98; tail 93, 94; tarsus 24, 24. Four adult females: bill 18.2, 18.3, 17.3, 18.0; wing 94, 95, 94, 92; tail 87, 84, 84, 87; tarsus 22, 24, 24, 24.

Nest and Eggs

The nest and eggs discovered at Stanley Bay on 13 December 1954 (No. AV. 1337.2) may also be described briefly. The nest is compact and relatively shallow, with a cup only $1\frac{1}{4}$ inches deep. It sits firmly, supported by side branchlets, on the foundation provided by the pine branch (the branch is of c. $1\frac{1}{2}$ inches diameter). It is lightly constructed, consisting mainly of coiled pliant fibres and twigs, with a scanty lining of fine fibres. On the outside rim of the nest there is also a sprinkling of white strands, apparently obtained from frayed cloth or fabric, together with some spiders' web. The nest is attached, but only very lightly, by means of this material to each of the three supporting side branchlets. This has apparently been bound round the branchlets while wet, as the material is tightly moulded on each branchlet.

There were three eggs in the clutch. They are handsomely marked: ground-colour pinkish, closely marked all over with spots and irregular blotches of reddish brown, and underlying pale purplish-brown shell-marks; the markings are thickest, tending to form a zone, round the broadest circumference. Shape a rather elongated ovoid, measuring 23.2 x 15.8, 23.5 x 16.0, 23.6 x 15.7mm.

Acknowledgements

Thanks are due for assistance during the investigation to Mr J. C. Cooper and officers of the Department of Agriculture (Auckland), and to Constable A. W. Reid; also to Mr R. B. Sibson for two observations made in Fiji.

References

- DEIGNAN, H. G., 1949. Races of *Pycnonotus cafer* (Linnaeus) and *P. aurigaster* (Vieillot) in the Indo-Chinese Subregion, *J. Washington Acad. Sciences*, 39 (8), 273-279.
- DELACOUR, J., 1943. A Revision of the Genera and Species of the Family Pycnonotidae (Bulbuls), *Zoologica*, 28 (1), No. 4, 17-28.
- LONDON, A., 1952. Bulbuls in Melbourne, *Emu*, 52, 67-68.
- MAYR, E., 1945. Birds of the Southwest Pacific. New York.
- SMYTHIES, B. E., 1953 (2nd ed.). The Birds of Burma. London.

- TURBET, C. R., 1938 - 39. Introduction and Acclimatisation of Animals, *Fiji Society of Science and Industry* 1938-39, 7 - 12.
- WHISTLER, H., 1949 (4th ed.). Popular Handbook of Indian Birds. London.
- WOOD, C. A., and WETMORE, A., 1925 - 26. A Collection of Birds from the Fiji Islands, *Ibis* 1925 - 26, 814 - 855, 91 - 136.

CLASSIFIED SUMMARISED NOTES

LIST OF CONTRIBUTORS

- | | |
|------------------------------------|-------------------------------------|
| Ardmore Teachers' Training College | G. K. McKenzie, Clevedon |
| Avis Acres, Mrs, Taupo | H. R. McKenzie, Clevedon |
| I. G. Andrews, Palmerston North | G. J. H. Moon, Warkworth |
| M. Atkinson, Miss, Wellington | T. J. Packer, Christchurch |
| M. S. Black, Rotorua | C. H. Parkin, Little Barrier |
| A. Blackburn, Gisborne | A. McG. Peart, Taumarunui |
| C. D. Blomfield, Auckland | C. Peart, Raglan |
| K. Blomfield, Miss, Whakatane | M. K. Potter, Hokitika |
| M. J. Breen, Nelson | A. Prickett, Mrs, Auckland |
| C. R. Buckeridge, Raglan | J. Prickett, Auckland |
| P. C. Bull, Lower Hutt | R. M. Royds, Invercargill |
| R. N. Buttle, Auckland | J. F. Robinson, Woodville |
| B. W. Campbell, Dunedin | S. C. Rutherford, Waiuku |
| O. R. Cartwright, Dunedin | V. M. Rutherford, Awhitu |
| R. S. Colegrove, Auckland | J. W. St Paul, Clevedon |
| A. C. Coutts, Auckland | R. St Paul, Minginui |
| J. Cowern, Kawhai | M. L. Sansom, Miss, Papakura |
| J. C. Davenport, Auckland | O. Sansom, Mrs, Invercargill |
| M. d'Auvergne, Mrs, Auckland | R. J. Scarlett, Christchurch |
| E. Dear, Kopane | H. L. Secker, Wellington |
| R. K. Dell, Lower Hutt | D. J. Shaw, Clevedon |
| Dunedin Naturalists' Field Club | R. B. Sibson, Auckland |
| D. P. Eyre, Otahuhu | B. Sladden, Tauranga |
| C. A. Fleming, Wellington | O. A. B. Smith, Mrs, Winton |
| R. E. W. Fordham, Ngongotaha | P. A. A. Stein, Auckland |
| D. Galey, Mangakino | S. W. Sutherland, Kawhia |
| M. B. Gill, Auckland | C. Tattershall, Rotorua |
| A. J. Goodwin, Miss, Clevedon | E. F. Townsend, Ardmore |
| A. G. Gorbey, Wellsford | R. H. Traill, Stewart Island |
| A. R. Harris, Dunedin | E. G. Turbott, Auckland |
| B. D. Heather, Wellington | D. A. Urquhart, Karaka |
| A. J. Hodgkin, Moa Flat, Heriot | L. E. Walker, Mrs, Dunedin |
| M. Hodgkins, Tauranga | M. A. Waller, South Kaipara |
| R. M. Jenkins, Mrs, Dunedin | H. G. Warburton, Auckland |
| King's College Bird Club, Otahuhu | J. W. Waters, Rotorua |
| N. Macdonald, Miss, Howick | J. Watt, Dunedin |
| D. Merton, Gisborne | W. A. Williamson, Dunedin |
| | K. J. Wenyss-Mitchell, Christchurch |
- N.I. KIWI (*Apteryx australis mantelli*). 31/1/55. 1 calling near Whangarei motor camp. (R.B.S.) Kawhia, scenic reserve at north end of harbour, one heard. (R. H. Meredith). W.S.S.
- S.I. KIWI (*Apteryx a. australis*). Dusky Sound. Aug. '54. 5 seen by T. Leask. (O.S.)
- LITTLE SPOTTED KIWI (*Apteryx oweni*). Tauranga Bay, Westport. 15/1/55. One captured alive and released by bushman. (T.J.P.)

- BLUE PENGUIN** (*Eudyptula minor*). Manukau. Some off Awhitu. 15/5/55. (S.C.R.) Tuamotu I., Gisborne. 3 prs. 17/10/54. (D.M.)
- N.Z. CRESTED PENGUIN** (*Eudyptes p. pachyrhynchus*). Dusky Sound. Aug. '54. 8 pairs, reported by T. Leask. (O.S.)
- SOUTHERN CRESTED GREBE** (*Podiceps cristatus australis*). Te Anau, west shore. 19/9/54. One seen in full breeding plumage. Pleasant Bay. 29/1/55. Two adults with one young preening and diving. (N.S.)
- DABCHICK** (*Podiceps rufopectus*). Pouto Peninsula, Northland; present on L. Rototuna, Kanono, Kahuparere, July, '55. (A.P., J.P., H.R.McK., R.B.S.). Whangata, Gisborne. 4/5/55. One shot by duck shooter. (D.M.) Motuopa Bay, Taupo. Seen with young. (A.A.)
- WANDERING ALBATROSS** (*Diomedea e. exulans*). Onetangi, Waiheke. An adult with hind parts and wings badly soaked in oil came ashore, found by Mrs Webster, and came into her garden close to beach, where it was given sprats; sent to Auckland Zoo 18/6/55, where it was partly cleaned; took sprats up to 9 inches; died 10/8/55 (in Auckland Museum). (E.G.T.) Manukau Heads. 25/10/54. One imm. dead. (R.B.S.) Cook St. 13/4/55. 25 between Lambton Quay and Tory Channel, the majority being sub-adults. Two seen flying constantly together. 6/10/55. 12 seen between Wellington Heads and Tory Channel. (H.L.S.) Awhitu pen. 1 juv. ashore. 1/5/55. (V.M.R.)
- ROYAL ALBATROSS** (*Diomedea epomophora*). Cook St. 13/4/55. Only two seen between Wellington Heads and Tory Channel. 6/1/55. Only one. (H.L.S.)
- BLACK-BROWED MOLLYMAWK** (*Diomedea melanophris*). Cook St. 13/4/55. Only one seen. 37/7/55. Sinclair Head, Wellington. One close to shore. 6/10/55. One adult and one imm. in Cook St. (H.L.S.)
- GREY-HEADED MOLLYMAWK** (*Diomedea chrysostoma*). Corpses. Waikanae. 3/7/54. 1 juv. (C.A.F.) Pukerua Bay. 4/7/54. 1 adult. (B.D.H.)
- BULLER'S MOLLYMAWK** (*Diomedea bulleri*). 6/10/55. One between Wellington Heads and Tory Channel. (H.L.S.) Foveaux St, Half-Moon Bay and Paterson Inlet. 20-24/4/55. Several. (H.R.McK.)
- WHITE-CAPPED MOLLYMAWK** (*Diomedea cauta*). Cook St. 13/4/55. 12 seen of which only three could be identified as *D. c. salvini*. Island Bay, Wellington. 10/7/55. One *D. c. cauta* close to shore. 31/7/55. None noted, when other albatrosses were ubiquitous. 6/10/55. Three between Wellington Heads and Tory Channel. (H.L.S.) Corpses. 11/7/54. 1 Wainui-o-Mata. (P.C.B., R.K.D.) 15/1/55. 1 Paraparaumu (C.A.F., R.B.S.) Awhitu pen. 29/1/55. 1. 2/3/55. 1. (V.M.R.)
- GIANT PETREL** (*Macronectes giganteus*). 6/11/54. One near Little Barrier. (E.F.T.) 22/8/55. Waitemata, between wharves and Rangitoto beacon, 16. (R.B.S.) Tauranga Heads. 28/8/54. One in flight. (B.S.) Mt Maunganui. 18/7/55. One on the coast after a heavy north-easterly. (M.H.) Westport. 1/1/55. 1 corpse. Dusky Sound. Aug. '54. Plentiful acc. T. Leask. (O.S.) Cook St. 5/10/55. Numbers apparently much the same as in Oct. '53, i.e. somewhat less than 200. (H.L.S.) Pareora, S. Canterbury. 15/1/55. One. (L.E.W.) Bluff. 28/1/55. Two. Paterson Inlet, Stewart I. 4/1/55. One. (J.W.)
- CAPE PIGEON** (*Daption capensis*). In Rangitoto Channel. 22/8/55. One. (E.O'C.D., E.G.T., R.B.S.) Gisborne wharf. 13/9/54. One. (D.M.) Cook St. 5/10/55. c. 25 between Wellington Heads and Tory Channel. (H.L.S.) Foveaux St. 14/5/54. One. 4/1/55. One. 28/1/55. One. (J.W.) Corpses. Puketutu causeway. 20/8/54. One. (R.B.S.) Awhitu. 18/10/54. One. 31/10/54. One. 20/6/55. One. (V.M.R.) Waikanae. 3/7/54. One. (C.A.F.)

SILVER-GREY FULMAR (*Fulmatus glacialoides*). Awhitu peninsula. Oct. '54. One. (S.C.R.)

BLUE PETREL (*Halobaena caerulea*). In 1954 another wave (the fourth for the winter) of wrecked birds came ashore in October; for in addition to the 14 Blue Petrels recorded by Davenport and Sibson (*Notornis*, 6, 115), four more were found as follows: Bethells, 23/10/54 (R.B.S.). Awhitu peninsula, 18/10/54 (V.M.R.). 23/10/54 and 27/10/54 (S.C.R.). The total, therefore, found on the Auckland West Coast in 1954 was 18. Te Horo, Wellington coast. 16/10/54. One. (B.D.H.) Waiuku gap, Awhitu pen. 11/6/55. One fresh corpse. (S.C.R.)

BROAD-BILLED PRION (*Pachyptila vittata vittata*). Few came ashore on west coast beaches in the winter. Muriwai. 1/5/55. 1. Bethells. 29/5/55. 1. (J.C.D., A.C.C., H.G.W.) Awhitu. 17/7/55. 1. (V.M.R.) Waikanae. 3/7/54. 11. (C.A.F.) 18/7/54. 1. Pukerua Bay. 4/7/54. 2. (B.D.H.)

LESSER BROAD-BILLED PRION (*Pachyptila salvini salvini*). Glink's Gully, Dargaville. 17/7/55. 2. (R.B.S.) Bethells. 29/5/55. 1. (A.C.C.) Awhitu. 28/11/54. 1. 4/12/54. 1. 29/5/55. 11. 20/6/55. 3. 17/7/55. 8. V.M.R., S.C.R.) Waikanae. 3/7/54. 24. (C.A.F.) 18/7/54. 3. Paekakariki. 3/7/54. 2. Paraparaumu. 18/7/54. 2. Pukerua Bay. 3/7/54. 4. 18/7/54. 2. Titahi Bay. 26/6/54. 4. (B.D.H.) Waikanae. 8/8/55. 1. (H.L.S.)

ANTARCTIC PRION (*Pachyptila desolata*). Muriwai. 1/5/55. 6. (J.C.D., H.G.W.) Awhitu-Waiuku. 29/5/55. 5. (S.C.R., V.M.R.) Puketutu causeway. 31/5/55. 2. (R.B.S.) Bethells. 29/5/55. 3. (A.C.C.)

NARROW-BILLED PRION (*Pachyptila belcheri*). Waikanae. 18/7/54. 1. Paraparaumu. 18/7/54. 1. Pukerua Bay. 4/7/54. 2. (B.D.H.) Wainui-o-Mata. 11/7/54. (P.C.B., R.K.D.) Awhitu pen. 29/5/55. 2. 17/7/55. 3. (V.M.R., S.C.R.)

FAIRY PRION (*Pachyptila turtur*). Pakiri-Te Arai Pt. 2/7/55. 9 recent. (G.J.M., H.R.McK.) Mt Maunganui. 18/8/55. 4. (M.H.) Awhitu coast. 29/9/54. 2. 18/10/54. 2. 28/11/54. 3. 4/12/54. 3. 29/1/55. 3. 2/3/55. 1. 17/7/55. 2. 26/7/55. 1. Muriwai. 1/5/55. 1. 4/9/55. 1. Bethells. 11/9/55. 1. 22/10/55. 1. (J.C.D., A.C.C., H.G.W., R.B.S.) Te Horo-Waikanae. 16/10/54. 1. 18/9/55. 13. (B.D.H., C.A.F., M.A.) Paraparaumu. 18/7/54. 1. Paekakariki. 6/2/55. 3. Pukerua Bay. 4/7/54. 1. 6/2/55. 8. 18/9/55. 3. (B.D.H., M.A.) Wainui-o-Mata. 11/7/54. 1. 21/11/54. 1. (P.C.B., R.K.D.) Cook St, between Wellington Heads and Tory Channel. Not seen on 13/4/55 or 5/10/55. (H.L.S.)

FLESH-FOOTED SHEARWATER (*Puffinus carneipes huiianus*). Hauraki Gulf. Nov. 1954 - May 1955. Plentiful. South of Kāwau and Great Barrier these generally outnumbered *P. bulleri*. (A.J.G.) Cook St. Several. 5/10/55. (H.L.S.) Corpses. Awhitu pen. 4/12/54. 1. 29/1/55. 1. (V.M.R.) Okariu Bay, Wellington. 31/12/54. 1. (H.L.S.) Hot Water Beach, Coromandel. 16/4/55. 1. (S.C.R.)

BULLER'S SHEARWATER (*Puffinus bulleri*). Hauraki Gulf. Leigh to Little Barrier. 6/11/54. Only 6 seen. (E.F.T.) Breamhead-Whangaroa. Feb. 1955. Very plentiful, greatly outnumbering *P. carneipes*. (A.J.G.) Corpses. Awhitu pen. Oct. '54. 1. (S.C.R.) 11/1/55. 1. (V.M.R.) Bethells. 22/10/55. 1. (R.B.S.) Te Horo. 16/10/54. 1. (B.D.H.)

SOOTY SHEARWATER (*Puffinus griseus*). Cook St. 13/4/55 and 17/5/55. None seen. 5/10/55. c. 50. (H.L.S.) Stewart I. 22/10/54. 3 large flocks. (R.M.T.) Corpses. Awhitu pen. 28/11/54. 9. 4/12/54. 8. 29/1/55. 1. 5/5/55. 1. (V.M.R., S.C.R.) Bethells. 22/10/55. 1. (R.B.S.) Waikanae. 18/7/54. 1 - an interesting midwinter record. Waikanae-Te Horo. 6/2/55. 5. (B.D.H.)

- TASMANIAN MUTTONBIRD** (*Puffinus tenuirostris*). Corpses. Motukawanui, Cavalli Is. and Matauri Bay. 28/12/54. 5 recently ashore. (B.D.H.) Pakiri. 24/12/54. 1. Ohope. 2/1/55. 1. (H.G.W.) Mt Maunganui. 11/12/54. 1. 18/12/54. 2. (M.H.) Muriwai. 13/2/55. 1. (A.C.C.) 1/5/55. 1 (outer primary still ensheathed). (J.C.D.) Awhitu pen. 29/1/55. 2. (V.M.R.)
- FLUTTERING SHEARWATER** (*Puffinus gavia*). Hauraki Gulf. Nov. 1954 - May 1955. Always numerous. (A.J.G.) Cook St. 13/4/55. Not seen in the strait. c. 30 outside entrance to Tory Channel. Grove Arm, Queen Charlotte Sound. 15/4/55. 4. Cook St. 5/10/55. c. 30. (H.L.S.) Corpses. Awhitu pen. 31/10/54. 1. 28/11/54. 1. 4/12/54. 1. (V.M.R.) Te Horo. 16/10/54. 3. 6/2/55. 3. Pukerua Bay. 18/7/54. 1. (B.D.H.) Waikanae. 18/9/55. 2. (M.A.)
- HUTTON'S SHEARWATER** (*Puffinus huttoni*). Cook St. 5/10/55. Several. (H.L.S.)
- BLACK PETREL** (*Procellaria parkinsoni*). Little Barrier I. 10/11/54. Some coming in around the summit. 2 dead on summit track. (E.F.T.)
- WHITE-HEADED PETREL** (*Pterodroma lessoni*). Corpses. Awhitu coast. 29/9/54. 1. 18/10/54. 2. 4/12/54. 1. 1/5/55. 1. 29/3/55. 1 found in paddock 500ft a.s.l. (V.M.R.) Te Horo-Waikanae. 16/10/54. 3. 18/9/55. 1. (B.D.H., M.A.)
- MOTTLED PETREL** (*Pterodroma inexpectata*). Awhitu. 4/12/54. 1. (V.M.R.)
- COOK'S PETREL** (*Pterodroma cooki*). Little Barrier. 6/12/54. Few seen on trip across. Calls of incoming birds heard every evening from 7.30 p.m. (E.F.T., A.T.T.C.) Mt. Maunganui, B.O.P. One found dead. 11/12/54. (M.H.)
- WHITE-FACED STORM PETREL** (*Pelagodroma marina*). Little Barrier I. 6/11/54. 6 seen on trip across. (E.F.T.) Hauraki Gulf. Nov. '54, May '55. On several trips small numbers seen, south of Kawau, off Bream Head and north-west of the Chickens. (A.J.G.)
- DIVING PETREL** (*Pelecanoides urinatrix*). Outside Catherine Bay, Great Barrier. 10/4/55. c. 300. (A.J.G.) Between Wellington Heads, Cape Terawhiti and Tory Channel rare in my experience, irrespective of species' breeding status on islands in western Cook Strait. Not seen 1953 - 1955 on four transects made between Wellington Harbour and Tory Channel and despite assiduous personal searching dead specimens few between 1946 - 1955 on beaches of Wellington Peninsula. However, I collected dead specimens not uncommonly on Wellington Peninsula beaches between 1940 - 1943. (H.L.S.) Corpses. Awhitu pen. 28/11/54. 1. 4/12/54. 3. 20/6/55. 1. (V.M.R.) Te Horo. 16/10/54. 4. Waikanae. 3/7/54. 1. 18/9/55. 1. Paekakariki. 4/7/54. 1. (C.A.F., B.D.H., M.A.)
- GANNET** (*Sula bassana serratator*). Whangaroa, at sea, 28/1/55 to 24/4/55. 43 young birds moving north. With two young on 24/4/55 was an adult. Seen on 20 sword-fishing trips out of 53. Largest tallies for one day, 8, 6, 3, 3. 8/8/55, one feeding in mouth of Whangaroa Harbour. In more advanced state of plumage than the earlier ones. (T.M.R.) South of Kawau I. 31/7/55. About 20 flocks of varying numbers of gannets were seen flying mostly in long line formations from a northerly direction fairly close to the Whangaparaoa Peninsula towards Waiheke Island. The birds were flying very low over the water, usually one behind the other, keeping perfect time together, sometimes gliding and sometimes with a slow wing-beat. The flocks, which were perhaps about 300 yards apart, varied from 3 to about 25 birds. It seems unusual to see these birds in actual flocks flying with such a purposeful air. (N.M.) White Island. 2/4/55. A few scattered over the nesting grounds and feeding offshore. No first season

- birds. (B.S.) Upper Manukau. 10/5/55. 20 plus. No juv. (R.B.S.) Awhitu. 16/2/55. c. 50 feeding a mile off outer coast. 15/7/55. 'There must have been thousands. They were, sitting on the water in rafts like shearwaters.' (V.M.R.) Kapiti passage. 14/1/55. 15 going south. (R.B.S.) Aotea Harbour. 15/1/55. c. 12, more than usual. (C.R.B.) Orowaiti, Westport. 12/1/55. 1. (T.J.P.) Off Seacliff. 12/5/55. 1. (H.R.McK. and L.E.W.) Karitane Estuary. 21/8/54. 2. 22/8/54. 1. (J.W.) Stirling Pt, Bluff. 26/9/54. 2. (R.M.R.)
- BLACK SHAG** (*Phalacrocorax carbo*). Young Nicks Head, Gisborne. 4/9/55. 20 pairs breeding, young nearly fledged; one nest 3 fresh eggs. (D.M.) Raglan Harbour, on an upper arm, late July '55, reported by D. Hirst, colony of c. 20 nests, containing large young, all of about same age. (H.R.McK.) L. Whakaki. 6-17/5/55. 300-400 came in between 7 and 8 a.m. daily, in lots of 30 to 40 from fairly high altitude. Feeding mainly on small carp. (R. St P.) Dawson Falls, Mt Egmont. 20/1/55. 1 flying over hostel. (A.P. and T.P.) L. Rahui, Buller Gorge. 4/1/55. Colony of 12-15 nests, some juv. in partial down. (T.J.P.) Waiiau R., Te Anau. 16/1/55. One observed to swallow a trout of about 2½ lb. (N.S.) Upper Aparima valley. 27/2/55. 7. (R.M.R.) Taieri mouth, Otago. 29/5/55. 3. (H.R.McK., L.E.W.)
- PIED SHAG** (*Phalacrocorax varius*). Little Barrier. 8/11/54. 24 nests with young in colony. (E.F.T.) Big Chicken I. 24/2/55. 40 plus roosting on southern side of island, no nests. (A.J.G.) The breeding colony is on the Middle Chicken. [Ed.] Clevedon river mouth. 31/3/55. 30. Aotea Harbour. 29/1/55. 2 in upper harbour. (C.R.B.) Kawhia. 20/8/54. 1 at wharf; apparently scarce here. (W.S.S., J.C.) Martin's Ck, Westport. 29/12/54. 1. (T.J.P.) Stewart I., Paterson Inlet. 21/5/55. A small nesting colony had a few birds with small young in nest and five sitting on eggs or small chicks. No large young present. (H.R.McK., R.H.T.)
- LITTLE BLACK SHAG** (*Phalacrocorax sulcirostris*). Takapuna, L. Pupuke. 22/5/55. 4 pairs breeding, well-grown young in two nests. (J.P., R.B.S.) Maraetai. 10/6/55. c. 30 being harried in shallow water by a Reef Heron. 11/6/55. 70 plus flying in V formation. Seen mostly in two parties on later dates, flying or feeding along shore. Not seen after 20/8/55. (C.D.B.) Papakura, in Drury Ck. 11/7/55. 6. 18/7/55. 13. Mixed flocks of small shags have been reported doing massed diving in this creek. (M.L.S.)
- LITTLE SHAG** (*Phalacrocorax melanoleucos*). Palmerston North, Hokowhitu Lagoon. April-May '55. Up to 15 present, including three of pied phase. (I.G.A.) Stewart I. 21/5/55. White-throated phase much more numerous (? 16-1) than pied. (H.R. McK., R.H.T.) Buller River mouth. 8/1/55. 3 of white-throated phase. (T.J.P.)
- STEWART ISLAND SHAG** (*Phalacrocorax carunculatus chalconotus*). Centre Island. 20/10/54. Nests counted 200 plus, on a rock off shore. (O.S.) Stewart I. 20-24/5/55. Plentiful at sea and in harbours, scattered, feeding and flying. c. 200 at a roost at 4 p.m. on Tomahou I. in Paterson Inlet. R.H.T. stated that it was one of several roosts and it would have 300-400 by evening. (H.R.McK., R.H.T.)
- SPOTTED SHAG** (*Stictocorbo p. punctatus*). Near Tiritiri I. 27/3/55. 1. (R.B.S.) Huich I., Coromandel. 9/3/55. 1. Off Hautapu Pt. 10/3/55. 1. (A.J.G.) Waimairi Beach, Christchurch. 1 imm. 30/1/55. (T.J.P.)
- WHITE HERON** (*Egretta alba*). L. Forsythe. 8/5/55. 1. (H.R.McK.) Hokitika, Three-mile Creek. 12-26/4/54. 1. 28/4/54. 2. (M.K.P.) Okarito, Waitangi-rotu. 26/10/54. 14 nests counted; mostly with young about 2 weeks old. 1 pair building and taking material from a White-throated Shag's nest. (A.B.) Oreti R., Benmore. 9/8/54. 1 in Price's Lagoon. (R.M.R.) Aparima. 24/6/55. 1. (O.S.)

- BLUE HERON** (*Egretta sacra*). Ruakaka. 21/1/55. 7. (A.G.G.) Karewa I., B.O.P. 28/8/54. 17, of which 7 flew out of a cave. Rabbit I. 17/10/54. 3 nests with 3 eggs each; and other nests building. (B.S.) Whakatane Heads. 8/8/54. New nest in fissure up rock face, no eggs. (C.D.B., K.B.) Muriwai, Gisborne. 21/8/55. 1 pair. (A.B.) Raglan. Harbour population c. 12. (C.P.) Kawhia. 1954. 2 pairs known to have nested. 22/7/55. 9. (W.S.S., J.C.) Merton-Karitane. 12/5/55. 2. (H.R.McK. and L.E.W.) Portobello. 10/10/54, one collecting nesting material; 28/11/54, one; 7/2/55, one; 12/2/55, one; 28/2/55, one; 7/3/55, one adult and one juv. feeding; 8/5/55, one feeding. (A.R.H.)
- WHITE-FACED HERON** (*Ardea novaehollandiae*). South Kaipara Heads. '55. 2 on Waionui inlet. (M.A.W.) Waikopu. 24/7/55. 7. (M.d'A., C.D.B.) Awhitu. 8/8/55. 2 settled in a tree and later flew to a pond and fed. (V.M.R.) Whangamata. 29/8/55. 1. Matata Lagoon. 31/8/55. 1. First? records for B.O.P. (R.B.S.) Woodville. 1 seen on 25/8/55 had apparently been in the vicinity for about six months. An interesting inland record. (J.F.R.) Waikanae. 1 pair may have attempted to breed, '54. Oh'au estuary. 16/1/55. 3. (C.A.F., R.B.S.) Porirua. 6/2/55. 3. Pauatahanui. 6/2/55. 8. (B.D.H.) Paremata-Porirua. 28/6/55. Several. (E.D.) Martin's Ck, Westport. 29/12/54. 24. Buller R. 14/1/55. 12. Otira. 2/7/55. 1. (T.J.P.) Turnbull R., S. Westland. 22/10/54. 4. Okuru. 2. (A.B.) Ashley River mouth. 8/5/55. 5. Heathcote-Avon estuary. 24/4/55. 5. 1-7/5/55. 7. (B.D.H., T.J.P.) L. Forsythe. 8/5/55. 7. (H.R.McK.) Kaituna Lagoon. 13/1/55. 3. (D.N.F.C.) Merton-Karitane. 12/5/55. 32-36, 32 in one group. Blueskin Bay. 12/5/55. 4. (H.R.McK. and L.E.W.) Portobello. 25/7/54 to 25/10/54. 2 to 9 seen regularly, then none seen till 7/3/55, increasing to 25 on 11/5/55. This bird regularly disappears in summer but returns in larger numbers on opening of shooting season. (A.R.H.) Invercargill est.-Awarua. 11/12/54. 11. 29/1/55. 10. April '55. 19. (R.M.R., O.S.)
- BITTERN** (*Botaurus stellaris poiciloptilus*). Stewart I. 13/1/55. 1 seen at Freshwater River. (J.W.) Awapuni Lagoon, Gisborne. 9/10/55. 1 pair nesting. Whakaki Lagoon, Wairoa. 5/3/55. 8. (A.B., D.M.)
- ROYAL SPOONBILL** (*Platalea leucorodia regia*). Manawatu estuary. 3/4/55. Local fishermen say one back for a week. (E.D.) 9/7/55. 10. (I.G.A., E.D., B.D.H.) Waitangi-roto Ck. 6 counted, 9 reported by Mr Ken Nolan. 3 nests high in old rimu trees. (A.B.)
- CANADA GOOSE** (*Branta canadensis*). Te Anau. 11-13/2/55. Several. Routeburn Huts. Small flock flying. (W.A.W.) Eglinton Valley. 9/4/55. 16 in flight. (N.S.)
- BLACK SWAN** (*Cygnus atratus*). L. Whakaki. 6/5/55. c. 6000 before shooting started.
- PARADISE DUCK** (*Tadorna variegata*). Matata. Development area. 20/6/54. 16 plus. (B.S.) Korohe, L. Taupo. 2 pairs. (A.McG.P.) Whakaki Lagoon, Wairoa. 5/3/55. Some present. (D.M.) Island Creek, Buller Gorge. 27/12/54. 3. Mohokinui R., Seddonville. 1 pair with 8 ducklings. Buller R., near Westport. 14/1/55. 7. (T.J.P.) Koiterangi, Westland. 24/5/54. 5. (M.K.P.) Washdyke, Timaru. 11/5/55. 100 plus. (A.G.G.) Mossburn, Te Anau, Eglinton area. Oct. '54-March '55. Counts on frequent week-ends showed largest flock to be 22. 17/4/55. Lynwood Station. 3 flocks each of 30 plus. 9/4/55. 100 plus at Knobb's Flat. Martin's Bay. Aug. '54. 200 plus. (O.S.) Milford Sound. 12/12/54. Plentiful. (R.M.T.) Mason Bay, Stewart I. 14/1/55. 10 on lagoon in sandhills. 15/1/55. 7 on Duck Creek. (J.W.)
- GREY TEAL** (*Anas gibberifrons*). Pehiri, Gisborne. 5/5/55. 1 shot in error. (A.B.) Portobello. 18/6/55. 20. (A.R.H.)

- BROWN TEAL** (*Anas castanea chlorotis*). Kaeo. 31/1/55 and 4/2/55. c. 120. (R.B.S., V.M.R.) Aug. '55. 39. (T.M.R.) Little Barrier I. Nov. '54. One found in fern c. 200 yards from sea. (C.H.P.) Great Barrier I. 5/9/55. Several colonies which must total c. 300 birds, reported by local inhabitants. (P.A.S.S.)
- SHOVELER** (*Anas rhynchos variegata*). Pouto Peninsula lakes. Winter '55. Present in small numbers. (A.P., J.P., H.R.McK.) Heathcote-Avon estuary. 24/4/55. 100 plus. (T.J.P.) Washdyke, Timaru. 15/4/55. 50 plus. (A.G.G.)
- BLUE DUCK** (*Hymenolaimus malacorhynchos*). Mangaokura stream. 22/3/55. 10 in pairs. Rakauroa. 10/6/55. Adult with 3 young. (A.B.) Reported from Mackley River, behind L. Rahui, Buller. (T.J.P.)
- NEW ZEALAND SCAUP** (*Aythya novaeseelandiae*). Rotorua. Usual winter flock in Sulphur Bay. Max. 340 plus on 21/6/55. Hamurana. 31/7/55. c. 180. (M.S.B. et al). Poutu Peninsula lakes. L. Kanono, 26 on 16/7/55. Small numbers elsewhere. (A.P., J.P., H.R.McK., R.B.S.) Te Anau. 11-13/2/55. Commonly seen. (W.A.W.)
- HARRIER** (*Circus approximans*). Coromandel. 21/10/55 (reported by N. L. Ogilvie). A nest on a steep slope on mound in shoulder-high bracken consisted of a low pile of dry grasses, with slight hollow in top; 4 eggs. (E.G.T.) Rotorua. Single bird regularly visits Kuirau Park, where a few rabbits still hold out. Common in rabbit-infested areas, e.g. Kaharoa, Reporoa and Atiamuri. (M.S.B.) Glenroy. 17/1/55. 1 Harrier and 1 Black-backed Gull on road both feeding on the same hare. (L.E.W.) Te Anau. 11-13/4/55. Several. (W.A.W.)
- BUSH HAWK** (*Falco novaeseelandiae*). Kawhia. Rather scarce. (W.S.S.) Rotorua. 12/4/55. 1 chasing sparrows. 15/5/55. Fine specimen, probably female, stooped at ducks on pond near Ward Baths. (M.S.B.) Broken River Valley, Canterbury. 15/1/55. 2, one of which was seen to catch and eat a rabbit. (D.N.F.C.) Near Fohn Lakes, at head of Beansburn Valley. 15/3/55. 1 at c. 1000 feet above the bush line. (B.W.C.)
- BROWN QUAIL** (*Synoicus ypsilophorus*). Tauranga. Steady increase in recent years; parties of up to a dozen seen daily in rough country. (M.H.) 1 flushed in central Manawatu; first seen in 30 years in this locality. (E.D.)
- CHUKOR** (*Alectoris gracca*). Lindis Pass, Otago. 10/10/54. 9 reported by W. F. Brown.
- BANDED RAIL** (*Rallus philippensis*). Paihia-Kawakawa road. 30/11/55. 5 seen. (R. St P.) Kawhia. 1 often seen in township. (W.S.S.)
- NORTH ISLAND WEKA** (*Gallirallus australis greyi*). Arid I. 4/9/55. Heard calling several times. (P.A.S.S.)
- WESTERN WEKA** (*Gallirallus australis australis*). L. Rahui, Buller Gorge. 4/1/55. 2. Mokokinui Mine, Seddonville. 6/1/55. 2. Coal Creek. 6/1/55. 1. (T.J.P.)
- STEWART ISLAND WEKA** (*Gallirallus australis scotti*). Golden Bay, Ulva I. 22/10/54. 1. Observation Rock. 22/10/54. 1. (R.M.J.)
- PUKEKO** (*Porphyrio melanotus*). Clevedon. 14/10/52. 1 pair with 5 chicks. (C.J.S.) Waimangu. 1/11/54. c. 10. Rotorua. 6/7/55. c. 19 on lake front. (M.S.B., R.E.W.F.) L. Taupo. 3/5/55. Common at Tokaanu. (A.A.) Hamurana. 1 or 2 pairs resident. (M.S.B.)
- MARSH CRAKE** (*Porzana pusilla*). Both this and the Spotless Crake (*P. tabuensis*) occur in swamp area behind Hokio Beach, Levin; recorded by F. H. Upton; identification checked with specimens in the Auckland Museum. (E.G.T.)



Figure 1. Showing the wrap-around (above) and spiral (below) types of coloured plastic bands.

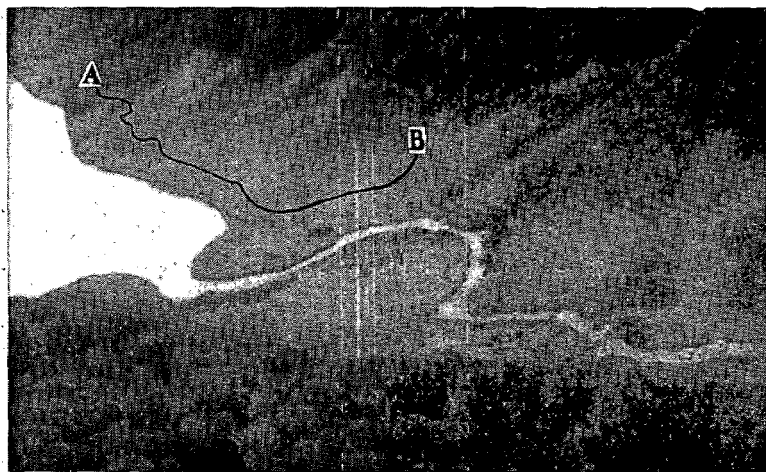


Figure 3. Line from A to B indicates route taken by Pair A with 1 chick on 26 December 1952.

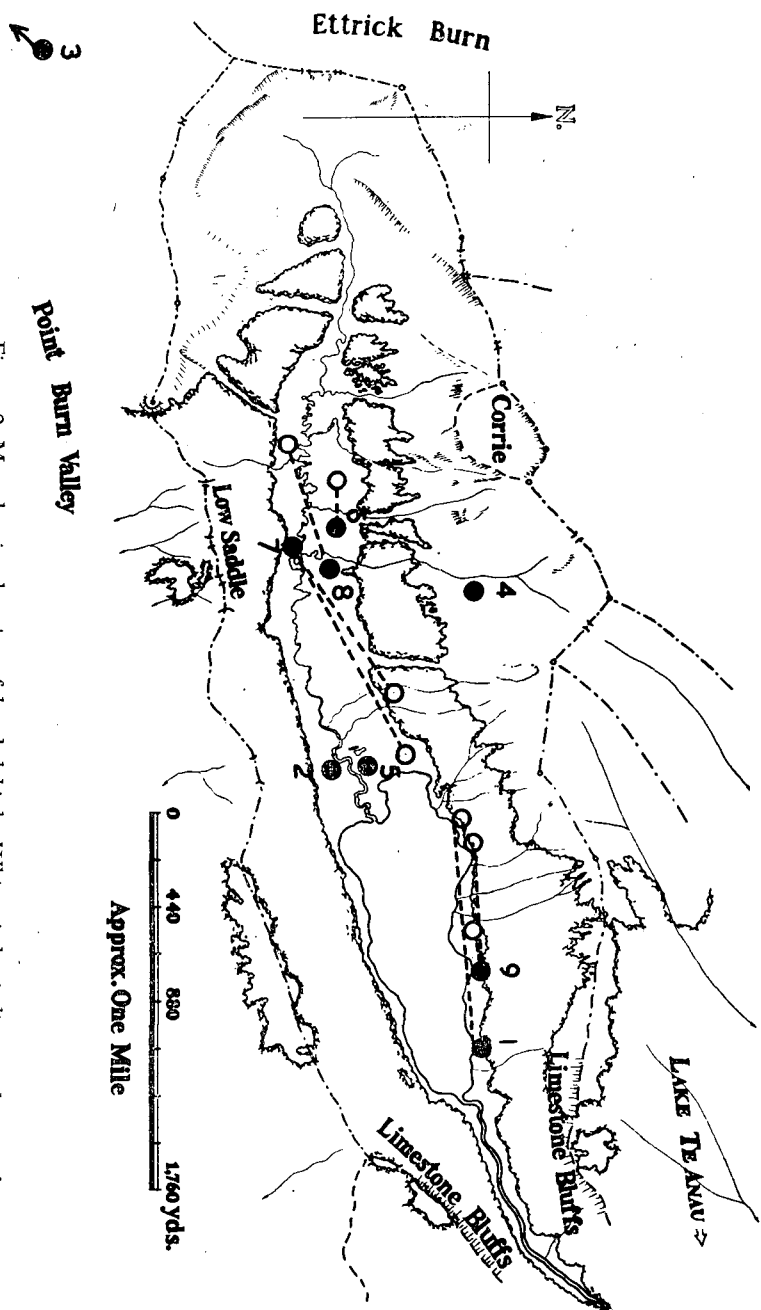


Figure 2. Map showing location of banded birds. White circles indicate sight records or recaptures and are connected by dash-line to the location of original banding (black circle).



Photo by courtesy *The New Zealand Herald*.

PLATE IV: Red-vented Bulbul (*Pycnonotus cafer*) and nest from Stanley Bay, Auckland (Auckland Museum).

TAKAHE (*Notornis mantelli*). Clinton Valley. Mid-March '55. Single bird seen by guide between Pompalona and the McKinnon Pass, reported to the Southland Museum. (O.S.)

SOUTH ISLAND PIED OYSTERCATCHER (*Haematopus ostralegus finschi*). Kaiata bank, Parengarenga. 31/1/55. 4. (V.M.R., R.B.S.) Tangaihi, Poutu peninsula. 25/4/55 and 30/7/55. 18. (A.P., J.P.) S. Kaipara Heads. 21/11/54. c. 39 summering. (R.B.S.) Clevedon river mouth. 31/3/55. 4. (A.J.G.) Aotea Harbour. 29/1/55. 9. 21/2/55. 20. (C.R.B.) Bowentown, B.O.P. 8/4/55. 11. (B.S.) Kawhia. 18/8/54. 300 plus on shellbank off wharf. 25/2/55. c. 120. 22/7/55. 176 plus. (W.S.S., J.C.) Manawatu estuary. 19/6/54. 3. (B.D.H.) 3/4/55. 5. (E.D.) 9/7/55. 1. (I.G.A.) Okari R., near Cape Foulwind. 11/1/55. 100 plus (T.J.P.) Ashley rivermouth. 1/5/55. 5000 plus. Waimakariri rivermouth. 1/5/55. 104. Heathcote-Avon estuary. 1000 plus. (B.D.H.) L. Linden. 15/1/55. 2. (D.N.F.C.) Warrington. 20/2/55. c. 1500. (L.E.W.) Karitane estuary. 23/8/54. c. 50. (J.W.) Taieri. 29/5/55. 30. (H.R.McK., L.E.W.) Portobello. 25/4/55. 40 plus. 2/5/55. 60 plus. 7/5/55. Flocks of 60, 50, 45, and stragglers flying to Papanui ocean beach. (A.R.H.) Merton-Karitane. 12/5/55. 80 plus. (H.R.McK. and L.E.W.) Eglinton Valley. 24/10/54. 1 pair with 2 chicks at Wesney Creek. (N.S.) Invercargill aerodrome, Oreti estuary, Bluff. Mid-May '55. Hundreds. (R.B.S.) Awarua Bay. 22/1/55. 38. (O.S., R.M.R., N.S.) Stewart I., Old Neck. 23/5/55. c. 408 in flock, apart from a flock of Black Oystercatchers, had evidently migrated south from the S.I. to winter. (H.R.McK., R.H.T.)

NORTHERN (VARIABLE) OYSTERCATCHER (*Haematopus unicolor reischeki*). Parengarenga. 1/2/55. A mixed pair, 1 pied, 1 black, with 2 smudgy young. Houhora. 2 pairs. 3/1/55. 1 pair all black, 1 pair darkly pied. (V.M.R., R.B.S.) Tangaihi, Poutu peninsula. 30/7/55. 6. (A.P., J.P., H.R.McK.) South Kaipara Heads. 21/11/54. 3. (R.B.S.) Ruakaka. 27/12/54. 4. (B.D.H.) 23/1/55. 4. (A.G.G.) Te Arai-Mangawhai. 20/11/54. 4 pairs. Nest with 2 eggs found on 27/11/54. (A.G.G.) Himatangi. 9/4/55. 1 pied with 1 black. Rangitikei estuary. 9/7/55. 2 pied. (I.G.A.) Turakina rivermouth. 2/4/55. 2. Manawatu estuary. 19/6/54. 13. 3/4/55. 1. (E.D., B.D.H.) Ohau estuary. 16/1/55. 2 pairs. 1 pair all black. 1 pair with some smudgy white. (C.A.F., R.B.S.) Whakatane Heads. 9/9/54. 26. 14/9/54. 20. Smudgy *reischeki* type oystercatchers are scarce here, but may be increasing. (B.S.)

BLACK OYSTERCATCHER (*Haematopus unicolor unicolor*). Muriwai, Gisborne. 21/8/54. 1 pair. (A.B.) Okari R., Westland. 11/1/55. 5. Heathcote-Avon estuary. 12/11/54. 1. (T.J.P.) Merton-Karitane. 12/5/55. 1. Taieri. 29/5/55. 3. (L.E.W., H.R.McK.) Pahia. 7/8/54. 2. Stirling Pt. Bluff. 17/10/54. 8. (R.M.R.) Milford Sound. 12/12/54. 2. (R.M.J.) Stewart I., Old Neck and near Bravo. 23/5/55. 29 and 20 plus. (H.R.McK. and R.H.T.)

SPUR-WINGED PLOVER (*Lobibyx novae-hollandiae*). Awarua. 12/9/54. Pair with 2 well-grown chicks. (O.S.) Oreti Beach. 18/12/54. 3. (R.M.R.) L. Waituna. 17/12/54. 5. 10/1/55. 7. Mataura I. 2. (O.S.) Invercargill aerodrome. 17/5/55. 14. (R.B.S., D.A.U.) L. George. 7/6/55. 8. L. Murihuku and vicinity. 10/6/55. 18. Te Anau. 20/6/55. 2. (O.S.)

PACIFIC GOLDEN PLOVER (*Charadrius dominicus fulvus*). Parengarenga. 31/1/55-3/2/55. Only 1 seen. (V.M.R., R.B.S.) Waitotara. 4/4/55. 7 (2 in full breeding plumage). Rangitikei. 2/4/55. 17 (5 being in breeding dress). (B.D.H.) Manawatu estuary. 3/4/55. 27 (8 in breeding dress). (E.D.) Ohau estuary. 16/1/55. 2. (R.B.S., C.A.F.)

BANDED DOTTEREL (*Charadrius bicinctus*). Parengarenga. 1/2/55. Flock of 41. (R.B.S.) Houhora. 3/1/55. c. 70. (V.M.R., R.B.S.) Poutu peninsula. 30/7/55. c. 60 on upland field. (A.P., J.P., H.R.McK.) Waiheke I., Te

Matuka Bay. 25. (A.J.G.) Waikopu, Whitford. 24/4/55. c. 200, keeping to top undressed pasture. 24/7/55. c. 250. (M.d'A., C.D.B.) Clevedon north. Winter population c. 250; 30/7/55, c. 150; 10/8/55, c. 100; 14/8/55, 60; 28/8/55, 60; 29/8/55, 31; 1/9/55, 5; 3/9/55, 7. (G.K.McK.) Tauranga, Matapihi flats. 24/1/55, c. 20, first seen for many months; 3/2/55, 40 plus; flock of 200 plus seen on 20/2/55 but not again; 5/3/55, 100 plus; 19/3/55, 30 plus; 2/4/55, c. 50; throughout winter till 29/7/55, not more than 10 birds counted in a day with a few also scattered along the open coast. (M.H.) L. Whakaki. 9/5/55. c. 300 on sandhills by beach. (R. St P.) Whatipu, Manukau Heads. 1/5/55. 10. (M.d'A., C.D.B.) Aotea Harbour. 100 plus winter '55. (C.R.B.) Kawhia. 15/5/55. c. 600 on golf links. (W.S.S.) L. Taupo. Breeds near Motuopa Bay. (A.A.) Rangitikei. 2/4/55. 70 plus. (B.D.H.) Manawatu estuary. 3/4/55. 50 plus. (E.D.) Palmerston North. 19/1/55. Nest with 1 egg and hen sitting; chick hatched on 23/1/55; 3 on 27/2/55; then none seen till 15/7/55. (I.G.A.) Hokio beach, Levin. 29/3/55. 5. (B.D.H.) Ohau estuary. 16/1/55. 55 plus, of which 47 were adults. Waikanae. Mid-January. c. 14. (R.B.S., C.A.F.) Orowaiti rivermouth, Westport. 26/12/54. 45 and 1 chick. (T.J.P.) Selwyn R. 8/1/55. 18 adults. Kaituna lagoon. 31/3/55. 27. Otago Harbour. 14/5/55. c. 80. (D.N.F.C.) Mararoa. 27/12/54. 15. (N.S.) Awarua Bay. 22/1/55. Numerous flocks of 14-18 birds. (O.S., R.M.R., N.S.) L. Hawkins, Invercargill. 17/5/55. c. 80. (R.B.S., D.A.U.) Stewart I., Old Neck. 23/5/55. 40 plus. (H.R.McK., R.H.T.)

NEW ZEALAND DOTTEREL (*Charadrius obscurus*). Parengarenga. 31/1/55. Not uncommon. Ruakaka. 4/2/55. 10 plus. (V.M.R., R.B.S.) Te Arai beach. 2/10/54, 6 pairs on territory; 20/11/54, 6 pairs, 1 nest 1 egg; May '55, 20 birds. (A.G.G.) Okahukura, Kaipara. 23/7/55 and 3/9/55. c. 20 among sand dunes. (A.G.G.) South Kaipara Heads. 21/11/54. 3 pairs, 1 pair with nest, 1 egg. (J.C.D., E.G.T., R.B.S.) Whatipu. 25/10/54. 1 pair. (R.B.S., R.N.B.) 1/5/55. 9. (M.d'A., C.D.B.) Waiheke, Te Matuka Bay. 10/12/54. 2. (A.J.G.) Opoutere and Ohui Beach, B.O.P. 30/8/55. 6 including a pair on territory. Whangamata. 2. Maketu rivermouth. 31/8/55. 1 pair. (R.B.S.) Tauranga Harbour, Panepane. 11/12/54. 1 pair. (B.S.) Awarua Bay, Southland. 22/1/55. 8 among Banded Dotterel. (O.S., R.M.R., N.S.) Stewart I., Old Neck. 23/5/55. 218 plus in one flock, few showing colour. (H.R.McK., R.H.T.)

WRYBILL (*Anarhynchus frontalis*). Parengarenga. 31/1/55. 1. Houhora. 3/2/55. 8. Ruakaka. 4/2/55. 1. (V.M.R., R.B.S.) Okahukura, Kaipara. 23/7/55. c. 20. 3/9/55. c. 30. (A.G.G.) Rangitikei rivermouth. 2/4/55. 4. Hokio beach, Levin. 29/3/55. 2. (B.D.H.) Manawatu estuary. 3/4/55. 23. (E.D.)

CURLEW (*Numenius madagascariensis*). Awarua Bay. 22/1/55. 3. (O.S., R.M.R., N.S.)

ASIATIC WHIMBREL (*Numenius p. variegatus*). Ashley rivermouth. 1/5/55. 1. (B.D.H.)

BAR-TAILED GODWIT (*Limosa lapponica*). Parengarenga. 31/1/55-3/2/55. c. 5000. Houhora. 3/2/55. 1000 plus. (V.M.R., R.B.S.) Ruakaka. 27/12/54. 39. (B.D.H.) 21/1/55. 100 plus. Mangawhai. 20/11/54. 300 plus. (A.G.G.) Pouto peninsula. 30/7/55. 50 at Tangitiki, 35 at Kelly's Bay. Matakohu. 31/7/55. 9. (A.P., J.P., H.R.McK.) Okahukura. 23/7/55. 500 plus. 3/9/55. c. 100. (A.G.G.) Wade River. 19/1/55. 6. (A.J.G.) Waikopu, Whitford. 20/2/55. 850 plus. 24/7/55. 110. (M.d'A., C.D.B.) Raglan. 12/2/55. 100 plus, thought to be total summer population. (C.P.) Kawhia. 25/2/55. 1500 plus. 22/7/55. c. 150. (W.S.S., J.C.) Aotea Harbour. 5/2/55. c. 1500. In the dark one can be directed to a flock of godwit by the numerous cries and quacks. These will stop when the birds are on the alert. On your approach a leader gives a single 'quack' and away goes the flock, apparently at this word of command. (C.R.B.)

Bowentown, B.O.P. 9/4/55. c. 300 restless and frightened. (B.S.) Tauranga, Sulphur Pt. Winter '54 count of c. 70 remained constant until first week of October when numbers doubled. 13/10/54 and 30/12/54, c. 400; 11/1/55, 600 plus; 22/2/55 and 19/3/55, c. 500; 9/4/55, 100 plus. Scattered birds throughout winter. (M.H.) Rangitikei R. 2/4/55. 20. Manawatu R. 3/4/55. 40 plus. 9/7/55. 17. (E.D., I.G.A., B.D.H.) 13/1/55. c. 120. (R.B.S.) Petone beach. 4/10/54. 7. (B.D.H.) Orowaiti rivermouth, Westport. Up to 5 between 26/12/54 and 9/1/55. (T.J.P.) Ashley R. 1/5/55. 6. Waimakariri. 1/5/55. 3. Heathcote-Avon estuary. 1/5/55. 300 plus. (B.D.H.) Warrington. 20/2/55. 3000 plus, one-third in breeding plumage. (L.E.W.) Merton-Karitane. 12/5/55. 31. (H.R.McK., L.E.W.) Awarua. 11/10/54. (R.M.R.) 22/1/55. 850 plus (O.S., R.M.R., N.S.) 29/1/55. 154. (R.M.R.) Moko-moko. 20/4/55. 210. (O.S.) Daffodil Bay. 1/5/55. 4. (R.M.R.) Invercargill aerodrome. 17/5/55. 38. (D.A.U., R.B.S.) Awarua Bay. 10/6/55. 109. (O.S.) Stewart I., Old Neck. 23/5/55. c. 160, c. 10 being very red. (H.R.McK.)

TURNSTONE (*Arenaria interpres*). Parengarenga. 31/1/55 - 3/2/55. c. 150. (V.M.R., R.B.S.) Te Arai. 18/12/54. 1 with N.Z. Dotterel. Okahukura. 23/7/55 and 3/9/55. 7. (A.G.G.) Invercargill estuary, Awarua. 11/10/54, 7; 29/1/55, 50; 1/5/55, 8. (R.M.R.) Awarua Bay. 22/1/55. 21. (O.S., R.M.R., N.S.)

KNOT (*Calidris canutus*). Parengarenga. 31/1/55 - 3/2/55. Some hundreds. (V.M.R., R.B.S.) Ruakaka. 23/1/55. 150 plus. Mangawhai. 20/11/54. c. 200. Okahukura. 23/7/55. 600 plus. (A.G.G.) Awapuni lagoon, Gisborne. 6/11/54. 1. (D.M.) Rangitikei rivermouth. 2/4/55. 7. (B.D.H.) Martin's Creek, Westport. 8/1/55. 9. (T.J.P.) Warrington. 20/2/55. 1. (L.E.W.)

RED-NECKED STINT (*Calidris ruficollis*). Parengarenga. 1/2/55. 1 with Banded Dotterels. (V.M.R., R.B.S.)

PIED STILT (*Himantopus h. leucocephalus*). Parengarenga. 31/1/55. c. 80. Houhora. 3/2/55. c. 30. (V.M.R., R.B.S.) Little Barrier I. July '54. 1 came and stayed for two days. (C.H.P.) Ruakaka. 4/2/55. c. 20. (R.B.S.) Te Arai. 18/12/54. 15. (A.G.G.) Waiheke, Te Matuka Bay. 8/2/55. 11. (A.J.G.) Pouto peninsula. 30/7/55. 12 at Tangitiki, 30 at Punahaere Ck. Matakoho. 31/7/55. 50 plus. (A.P., J.P., H.R.McK.) Raglan. 12/2/55. c. 40. (C.P.) Aotea Harbour. Autumn and winter population '55, 300-400. (C.R.B.) Kawhia. 25/2/55. 75. 22/7/55. c. 250. (W.S.S., J.C.) Whangamata. 30/8/55. 9. Opoutere. 15. (R.B.S.) Tauranga. 2/10/54. 10 - 15 on Matapihi mudflats in spring, rising to 70 in December; summer numbers at Sulphur Pt roost 50 - 80; 9/4/55, c. 120. (M.H.) Young Nicks Head, Gisborne. c. 150 on salt swamp all winter. (A.B.) Whakaki lagoon, Wairoa. 5/3/55. 120, including many immature. (D.M.) 6 - 17/5/55. Best count on one day 150. (R. St P.) L. Taupo, Korohe. Aug. '55. 50 feeding on open swamp. (A.M.G.P.) Breeds near Motuopa Bay. (A.A.) Rangitikei estuary. 9/7/55. c. 40. Foxton beach. 13/1/55. 100 plus. (R.B.S.) Manawatu. 30 plus. Palmerston N. 19/1/55 - 8/2/55. 1 pair with 2 juv. on shingle bed. (I.G.A.) Ohau estuary. 16/1/55. 2 pairs with downy young, 10 adults in flock. Hokeo. 17. Te Horo. 14/1/55. 1 pair with 3 young feathering. Waikanae. 13/1/55. c. 20. (C.A.F., R.B.S.) Waikouaiti. 12/5/55. 20 plus. Merton-Karitane. 12/5/55. 50 plus. Blueskin Bay. 12/5/55. 12 plus. (H.R.McK., L.E.W.) Te Anau, mouth of Upukeroro R. 12/2/55. 3. (W.A.W.) Thornbury. 28/8/54. 8. Waimatuku rivermouth. 18/10/54. 7. (R.M.R.) Mararoa R. 27/12/54. 5. (N.S.) Invercargill, L. Hawkins. 17/5/55. c. 50. Bluff. 16/5/55. Some dozens. (D.A.V., R.B.S.)

SOUTHERN SKUA (*Stercorarius skua lonnbergi*). Stirling Pt, Bluff. 26/9/54. 1. (R.M.R.)

POMARINE SKUA (*Stercorarius pomarinus*). Parengarenga. 3/2/55. A big skua, chasing a *Caspian Tern*, early in the morning before the haze had cleared, was believed to be a *Pomarine*. During our stay of four days there were no *White-fronted Terns* in the harbour to attract *Arctic Skuas*. (R.B.S., V.M.R.)

ARCTIC SKUA (*Stercorarius parasiticus*). Rangitoto - Kawau. 27/3/55. 4. (R.B.S.) Waikanae. 15/1/55. 2. (C.A.F., R.B.S.) Near Kawau. 18/6/55. 1 chased a flock of Red-billed Gulls which were feeding in the water. The Skua was not able to single out one bird, as when chasing terns, because the gulls packed closely together and rose about 500 feet in a flock. (G.H.M.) [A midwinter record of the Arctic Skua is of considerable interest. Previous records in May and August have suggested that these skuas may remain in N.Z. waters throughout the winter. Ed.]

BLACK-BACKED GULL (*Larus dominicanus*). Mangawhai. 20/11/54. c. 30 nests with chicks and eggs. Pakiri. 27/11/54. Small colony much more advanced than Mangawhai colony. (A.G.G.) Mairangi Bay. 12/7/55. 2 separate pairs posturing in a circle, dipping up and down. (H.G.W.) Gisborne. 31/10/54. Many nests with eggs. (A.B., D.M.) Rahui, Buller Gorge. 4/1/55. 2. (T.J.P.) Fohn Lakes. 15/3/55. 2. (B.W.C.)

RED-BILLED GULL (*Larus novae hollandiae scopulinus*). Mt Maunganui. A small colony bred on the rocks of the north-west corner of the Mount and were there till late February with young. Said to be the first nesting at this point for some years. (M.H.) Rakaia rivermouth. 11/1/55. 51 young birds on shingle bank. (D.N.F.C.)

BLACK-BILLED GULL (*Larus bulleri*). Mataitai, Clevedon. 1/5/55. 4. (H.R.McK.) Gisborne Harbour. 5/1/55. 42 nests with young or eggs on old groyne. (D.M.) Ohau estuary. 16/1/55. 2. Hokeo. 24. Waikawa. 2. (C.A.F., R.B.S.) Oreti. 17/5/55. Scores in fields attending the harvesting of the potato crop. (R.B.S., D.A.U.) Stewart I., Old Neck. 23/5/55. 200-300, evidently had gone south to winter. (H.R.McK., R.H.T.)

BLACK-FRONTED TERN (*Chlidonias hybrida albostratus*). Rangitaiki rivermouth. 2/9/55. 8 juv., probably yearlings. (R.B.S.) Himatangi beach. 9/4/55. 4, one having an almost pure black cap, orange bill, red legs; the other three having grey-speckled heads, dark bills, red legs. Manawatu estuary. 9/7/55. 2. (I.G.A.) Karitane. 12/5/55. 4. (H.R.McK., L.E.W.) Te Anau, Upukerora R. 12/2/55. 40. (W.A.W.) Mararoa. 27/12/54. 3 nests seen, 1 with 2 eggs, 2 with 1 egg each; one chick also was observed being fed. (N.S.) Stewart I., Old Neck. 10 plus, others flying in Paterson Inlet; these must have come south to winter. (H.R.McK., R.H.T.)

CASPIAN TERN (*Hydroprogne caspia*). Little Barrier I. 10/8/54. 2 close inshore; seldom seen from the island. (C.H.P.) Mangawhai. 7/11/54. Visited annual breeding grounds, found 30 adults but no trace of nests. (A.G.G., H.R.McK.) Waikopu. 20/2/55. 20. (M.d'A., C.D.B.) Papakura. 18/7/55. 8. (M.L.S.) Matakana I., Tauranga. 17/10/54. 90-100 birds present; 3 nests had 3 eggs each, the rest 1 or 2 eggs. (B.S.) Aotea Harbour. 23/4/55. 15-20; usually 10-15 in the harbour. (C.R.B.) Turakina. 2/4/55. 1. Rangitikei. 1. (B.D.H.) Manawatu rivermouth. 3/4/55. 5. (E.D.) Himatangi beach. 9/4/55. 7. (I.G.A.) Heathcote-Avon estuary. 1/5/55. 31. (B.D.H.) Tauranga Bay, Westport. 11/1/55. 4. Okari R. 2. Waimari beach, Christchurch. 30/1/55. 9. (T.J.P.) Warrington. 20/2/55. 3. (L.E.W.) Portobello. 3/6/55. 5. (A.R.H.) Awarua, Invercargill estuary. 11/10/54. 2. (R.M.R.)

WHITE-FRONTED TERN (*Sterna striata*). Parengarenga. 31/1/55-3/2/55. None. Taipa beach. 3/2/55. c. 40, including only one mottled youngster. (R.B.S., V.M.R.) Whatipu. 1/5/55. 650 plus. (M.d'A., C.D.R.) Gisborne. 17/12/55. 18 nests on old groyne. (D.M.) Himatangi beach. 9/4/55. c. 800. (I.G.A.) Hokitika R. 23/10/54. 15. (M.K.P.) Warrington.

2/2/55. 1. (L.E.W.) Merton-Karitane. 12/5/55. 12. Taieri rivermouth. 19/5/55. c. 400. (H.R.McK., L.E.W.) Stewart I. 21-23/5/55. Some always visible flying or feeding. None resting at Old Neck. (H.R.McK., R.H.T.)

NEW ZEALAND PIGEON (*Hemiphaga novaeseelandiae*). Little Barrier I. 24 in one party on the flat. (E.F.T., A.T.T.C.) Dome Valley, Warkworth. Not uncommon. (A.G.G.) Moumoukai, Clevedon. '54-'55. More plentiful than for many years. (J.W.StP.) Kawhia. Not numerous, but holding its own. (W.S.S.) Minginui. Max. of up to 35 daily Feb.-March. Food - Feb.-April, tawa, miro, matai, with kahikatea from mid-March; May-June, kahikatea; July, puta-puta-weta and the last of the miro. 20 on a small miro was a fine sight. (R.StP.) Tauhara, Taupo. Plentiful. (A.A.) Ahimanawa Ranges. Widespread and numerous. (M.J.B.) Mangaokura stream, E. Coast. 3/4/55. Very plentiful. (A.B.) Half-way between Taumarunui and Turangi. Plentiful. (A.McG.P.) Mt Arthur Range. Appears to be always numerous. (M.J.B.) Ashley Gorge. 19/1/55. 1. (L.E.W.) Queen's Gardens, Dunedin. 17/6/55. 1 on ground following snow. (W.A.W.) L. Rahui, Westland. 4/1/55. 4. (T.J.P.) Manapouri. Feb. '55. 6 in one tree. (W.A.W.)

NORTH ISLAND KAKA (*Nestor meridionalis septentrionalis*). Big Chicken I. 24/2/55. Seen eating berries of *Nothopanax arboreum*. (A.J.G.) Otahuhu. 27/7/55. 2 flying high and calling. (D.P.E.) Moumoukai, Clevedon. Apparently still dwindling. (J.W.StP.) Kawhia. Dec. '54. 3 at head of Kawaroa Ck. (R. H. Meredith) Minginui. Improved numbers, up to 10 seen in one day. (R.StP.) Raukumara Range. 21/3/55. 6 inland from Te Puia. (A.B.) Ahimanawa Range. 23/1/54. 4 at 3000 ft. (M.J.B.) Taupo. 27/4/55. 1 reported in a gum. (A.A.)

SOUTH ISLAND KAKA (*Nestor m. meridionalis*). Flora Saddle. 6/2/55. 3. (M.J.B.) Mt Aspiring Station. Nov. '54. Pair nesting in stump of rotted tree. (L.E.W.) Lower Hollyford Valley. 5/3/55. Seen in fuchsia. (B.W.C.) Lonnerker's Bay, Stewart I. 1/1/55. 12 plus in gums. (J.W.) Manapouri. Feb. '55. 1. (W.A.W.)

KEA (*Nestor notabilis*). Graham River, Mt Arthur. 6/2/55. 1 in bush at 1500ft; numerous above bush line. (M.J.B.) Franklin Mts. 8/5/55. 12 reported. (O.S.) Dusky Sound. 8/854. Flock of 25 seen. Mr T. Leask reported that the birds tore the sails of the *Comet* to ribbons. (O.S.)

EASTERN ROSELLA (*Platycercus eximius*). Whangarei, Kaigoose Valley. 3 reported by Mr N. Millar. The northward spread continues. (H.R.McK.) Gisborne. 1 about for several months. (A.B.) Cave Creek, Eastern Otago. 2/4/55. 2 in *Nothofagus menziesii*. (B.W.C.)

RED-FRONTED PARAKEET (*Cyanoramphus novaeseelandiae*). Big Chicken I. and Hen. I. 25/2/55. Plentiful. (A.J.G.) Little Barrier. Scattered. (E.F.T.)

YELLOW-CROWNED PARAKEET (*Cyanoramphus auriceps*). Minginui. Up to 7 throughout year. Young bird flying in November. Whirinaki R. 10/4/55. 10. Sometimes seen in company of Whiteheads. (R.StP.) Ahimanawa Range. 23/1/54. 7 seen at c. 3000ft were presumably of this species. (M.J.B.)

PARAKEET (Sp?). Graham R., Mt Arthur Range. 6/2/55. 3 at 2000ft. Flora R. 13/5/55. 2 at 2000ft. A single bird at 2300ft, seen at a distance of 20ft, was thought to be *C. malherbi*. (M.J.B.)

SHINING CUCKOO (*Chalcites lucidus*). Brown's Bay. 2/6/55. Full call. Bird also seen on three separate days by two reliable observers. (H.G.W.) Heard in the following towns: Matamata, 2/1/55; Te Araroa, 7/1/55; Kai-iwi, 13/1/55; Mokau, 15/1/55. (H.G.W.) Little Barrier I., 5/10/54, first song; 27/3/55, last full song. (C.H.P.) Remuera, 12/9/54, first heard

in garden, 2 complete calls and several downward slurs; heard and seen next day. (J.C.D.) 8/9/54. 1 singing strongly in the garden; not recorded again till 5/10/54. (R.B.S.) Clevedon, 7/10/54, first song, no slur. Wade R., heard frequently in full song. 9/10/54, Clevedon, first full song. (A.J.G.) 6/10/54 (Miss M. Waters); 7/10/54 (Miss K. Browne). 8/10/54, Ponui Island (P. Chamberlin). Aotea Harbour, first song 12/10/54. (C.R.B.) Waihirere, Gisborne, 4/8/55, first calls reported; plentiful by 23/8/54. (A.B.) Taupo, first heard in late Sept. (A.A.) Minginui, 29/9/54, first seen and heard. October, singing well; one heard at 2 a.m. February, seen, not heard, the last on 20/2/55. (R.StP.) Dawson's Falls, 14-21/1/55, 1 fed by 2 Riros. (A.P., J.P.) Ahimanawa Range, 23/1/54, 3. (M.J.B.) Flora track, 6/2/55. (M.J.B.) Porter's Pass, 15/1/55, 1; Montgomery's Bush, 1; Kennedy's Bush, 12/1/55, 1. (D.N.F.C.) Waioero, 24/10/54, one heard giving last part of song several times before starting first part. Vauxhall, Dunedin, 4/11/54, first heard. Mt Aspiring Station, 29/10/54, 1 in garden. Rakaia Gorge bridge, 17/1/55, 1 singing. Ashley Gorge, 17-18/1/55, calls heard. (L.E.W.) Stewart I., 30/10/54-9/11/54, heard frequently. (R.J.S., K.J.W.M.)

LONG-TAILED CUCKOO (*Eudynamis taitensis*). Little Barrier I., 7/3/55, 5 together, this being the annual pre-migration gathering, which usually occurs late in February. (C.H.P.) Clevedon, 11/12/54, 2 a.m., calls heard. 22/12/54, 10.35 p.m., 1 flying south calling. 30/3/55, Miss F. Booker reported one in garden. (H.R.McK.) Rotorua, 17/2/55, several calls at 12.30 a.m. over the lake. (R.B.S.) Minginui, 1/11/54, first seen and heard; 14/1/55, last appearance. (R.StP.) Gisborne, 24/8/55, first call heard; pair in same vicinity as last year. (A.B.) Ahimanawa Range, 23/1/54, 3. Flora Saddle, 6/2/55, heard. (M.J.B.) Colac Bay, 9/1/55, 2. (R.M.R.) Te Anau, Waiau R., 12/1/55, 1. (N.S.) Manapouri, Feb. '55, 1. (W.A.W.)

MOREPORK (*Ninox novaeseelandiae*). Rotorua. A few birds spend the winter in the borough, apparently arriving in March and departing in September. The species may be increasing, though the opossum by appropriating the owls' nesting sites is its worst enemy. In recent years one or two have remained in the town area over the summer months. (M.S.B.) Mangakino and Kileith. Often heard. (D.G.) Taupo. Not plentiful. (A.A.) Minginui, late June '55, odd ones on bush edge sunning themselves between 3 and 4 p.m. on cold frosty days. (R.StP.) Ashley Gorge. 18/2/55. calling. (L.E.W.) Thomson's Bush, Invercargill. 2/5/55. 1 heard at 6.30 a.m. (R.M.R.)

KINGFISHER (*Halcyon sancta vagans*). Parengarenga. Jan. '55. An albino reported. (R.B.S.) Rotorua. Appears in town area in early March and departs for breeding grounds in September. A pair breeds regularly at Hamurana and a few pairs about the lakes. (M.S.B.) Ngongotaha. 7/4/55. 2 in garden. (R.E.W.F.) Minginui. Aug., none; Sept., arrived from lower country or coast for breeding; Oct.-Jan., up to 10; Feb., decreasing; June-July, none. (R.StP.) Taupo. Not common. (A.A.) Ashley Gorge. 18-19/1/55. 2 calling all day. (L.E.W.) Merton-Karitane. 12/5/55. 6. (H.R.McK., L.E.W.) Lower Flats, Beansburn Valley. 15/3/55. 1. (B.W.C.) Stewart I. 1/11/54. 1 at Observation Rock. (R.J.S.)

KOOKABURRA (*Dacelo novaeguineae*). Puhoi rivermouth. 23-31/12/54. 2 family groups seen regularly, one with 1 fledgling, the other with 2. (J.C.D.)

RIFLEMAN (*Acanthisitta chloris*). Raukumara Range, Waikareiti track. 22/1/55. Small parties totalling c. 50. (A.B.) Inland from Te Puia, plentiful in 'red birch' country. (A.B.) Opepe, present. (A.A.) Woodville Domain. 12/12/54, 2 pairs. (I.G.A.) Dawson Falls, Mt Egmont. Plentiful. (A.P., J.P.) L. Rahui. 4/1/55. 2. (T.J.P.) Flora track. 6/2/55. Numerous. Mt Arthur country. 9-13/5/55. Numerous throughout.

- (M.J.B.) Castlehill Station, S. Canterbury. 15/1/55. 2 on edge of beech country. Upper Aparima. 27/2/55. 6. (R.M.R.) Manapouri, plentiful. (W.A.W.)
- ROCK WREN** (*Xenicus gilviventris*). Head of Forgotten R., Olivine Range. 10/3/55. 2 at 6000ft. (B.W.C.)
- SKYLARK** (*Alauda crvensis*). Manapouri - Te Anau. Seen and heard frequently on 'wilderness' flats. (W.A.W.) Centre I. 20/10/54. 13. (O.S.)
- FANTAIL** (*Rhipidura fuliginosa*). Gisborne. 21/11/54. Pair, 1 pied, 1 black, feeding 3 pied and 1 black young. (A.B.) Wellington. June '55. 1 black phase in Wilton's Bush. (H.L.S.) Rakaia Bridges. 17/1/55. 2 black, 5 pied. (L.E.W.) Powder Ck. 29/5/55. 4 black, 10 pied. (H.R.McK., L.E.W.) Camerons. 19/4/54. Several black. (M.K.P.)
- PIED TIT** (*Petroica macrocephala toitoi*). Little Barrier. 8/11/54. Pair with nest, 3 chicks. Kawhia. 1 seen (R. H. Meredith); now rare (W.S.S.). Minginui, usual numbers. They must be all through the Murupara and Kaingaroa forest along the roads and fire breaks. 28-29/10/54. Males feeding females. (R.StP.) Spiral Hill, Raurimu. April '55. 1 male. (A.McG.P.) Dawson Falls. 14-21/1/55. Seen daily. (A.P., J.P.) Mangaokura stream, East Coast. 3/4/55. Common. (A.B.) Taupo, frequently seen in the bush. (A.A.) Ahimanawa Range. 23/1/54. Present at 3000ft. (M.J.B.)
- YELLOW-BREASTED TIT** (*Petroica m. macrocephala*). Mt Arthur country. 6/2/55, 9-13/5/55. Well distributed. (M.J.B.) Hokitika Gorge. Present. (M.K.P.) L. Rahui 4/1/55, Seddonville 6/1/55, Coal Creek 7/1/55. Plentiful. (T.J.P.) Ashley Gorge. 17/1/55. 1 male. (L.E.W.) Flagstaff, Dunedin. 29/5/55. 1 pair. Powder Ck. 3 males, 1 female. Summit, Waiholo-Taieri mouth road. 2. (H.R.McK., L.E.W.) Manapouri. Common. (W.A.W.) Bluff hill. May '55. 1 singing just the same song as Pied Tits sing on Hen I. (D.A.U., R.B.S.) Stewart I. 4 males seen near Horseshoe Bay. (R.J.S., K.J.W.M.)
- NORTH ISLAND ROBIN** (*Petroica australis longipes*). Okataina track. 31/10/54. 2 singing. Horo-horo plateau. 24/10/54. 5 seen, including 4 males, widely dispersed, suggesting extensive territories. (M.S.B., W.J.W.) Minginui. Usual numbers in heavy bush; coming for grubs when posts are being split. (R.StP.) Kaingaroa. 15/7/54. 2. (M.K.P.) Taupo bush. Scarce. (A.A.) Spiral Hill, Raurimu. April '55. 1 in heavy bush. (A.McG.P.) North Egmont. 17/1/55. 1. (A.P., J.P.)
- SOUTH ISLAND ROBIN** (*Petroica australis australis*). Flora Saddle and River. 6/2/55. 13/5/55. Takahe R. Appear to be well distributed. (M.J.B.) Camerons. 19/4/54. 1. Hari Hari. 10/10/54. 3 males and 1 female in State Forest No. 41. (M.K.P.) L. Rahui. 4/1/55. 3 males. (T.J.P.) Manapouri. February '55. Several. (W.A.W.)
- STEWART ISLAND ROBIN** (*Petroica australis rakiura*). Freshwater R. 13/1/55. Several. (J.W.)
- FERN BIRD** (*Bowdleria punctata*). Tauranga, Wairoa rivermouth. Frequently seen and heard, especially during the winter. (M.H.) Minginui. A few seen and more heard throughout the year. (R.StP.) Waimea Ck, Westport. 27/12/54. 1. Fairdown, Buller. 13/1/55. 3. (T.J.P.) Moa Flat. 16/12/54. 2. (A.J.H.) Otatara. 11/5/55. 2. (O.S.) Stewart I., Freshwater Flats. 13-15/1/55. Several seen and heard. Besides 'u-tick', three other distinct calls were heard. (J.W.)
- BROWN CREEPER** (*Finschia novaeseelandiae*). Mt Hercules, S. Westland. 23/8/55. 8. (M.J.B.) Te Anau. 16/1/55. 2. (N.S.) Stewart I., Ulva. Plentiful. (R.J.S., K.J.W.M.)
- WHITEHEAD** (*Mohoua ochrocephala albicilla*). Mangaokura stream, East Coast. 3/4/55. Large flock feeding on miro. (A.B.) Little Barrier I.

- 8/11/54. Nest 3 eggs, 1 chick. (E.F.T.) Arid I. 4/9/55. 4. (P.A.S.S.) Minginui, up to 80 seen in a day and up to 300 on trips up streams. (R.StP.) Dawson Falls. 14/1/55. Several. (A.P., J.P.) Ahimanawa Range. 23/1/54. Numerous. (M.J.B.)
- YELLOWHEAD** (*Mohoua o. ochrocephala*). Flora R. 13/5/55. 7. 19/6/55. 7 plus. (M.J.B.) Manapouri. Feb. '55. Heard. (W.A.W.)
- GREY WARBLER** (*Gerygone igata*). Horo-Horo plateau. 24/10/54. Common along logging tracks and clearings; 1 pair feeding 2 full-fledged young. (W.J.W., M.S.B.) Minginui. 8/12/54. 3 flying young with parents. May-early August, song much reduced. (R.StP.) Taupo. Not plentiful. (A.A.) Flora track and Mt Arthur Range. Numerous. (M.J.B.) Christchurch. 5/9/55. Nest in *C. macrocarpa*. (T.J.P.)
- SONG THRUSH** (*Turdus ericetorum*). Mairangi Bay, 9/4/55, first song. (H.G.W.) Clevedon, 23/4/55, first song. (A.J.G.) 26/4/53, first song. 23/12/53, last song. 16-19/4/54, first song. Song ceased between 25/12/54 and 5/1/55. (H.R.McK.) Minginui, August-January, singing strongly. February, decreased. March, ceased. April, silent. Song started 18/5/55. June-July, full song. Season appears different from that in lower country. (R.StP.) Rotorua, 7/5/55, first full song 4.30 p.m. Last song 29/12/54, a 'mere travesty'. This species appears to have been declining around Rotorua for a number of years. Blackbirds now outnumber Thrushes by roughly 6 to 1 in the urban area; and in the countryside there has been an estimated decline of 33 per cent over the last 5-7 years. (M.S.B.) Tauranga, 16/1/55, one seen cracking open mud snails (*amphibola*) on the shore; piles of crushed shells show that these snails must here be a common source of food. (M.H.) Botanical Gardens, Dunedin, 1/6/55, one gave full song on the ground. (O.R.C.)
- BLACKBIRD** (*Turdus merula*). Mairangi Bay, 10/6/55, first song. (H.G.W.) Clevedon, '53, song began June 16-19; one bird continuous from July 1; full chorus from August 3; song ceased December 5. '54, 1 singing thrice in March; 1 on July 6; 2 August 3 and 4; regular from August 18; ceased December 8. (H.R.McK.) Minginui, '54, August, no song; September, started to sing on 16th, occasional song in the evenings only; October, song morning and evening; November, song at its best; December-February, good song finishing on March 10; April-July, none. Singing season about three months later than at Clevedon. (R.StP.) Rotorua, 2/8/55, first full song, after some practice in late July. Blackbird song dominates the dawn and evening chorus from September to mid-December. 28/12/54, last song. (M.S.B.)
- DUNNOCK** (*Prunella modularis*). Clevedon, 26/3/54, first autumn song. (A.J.G.) Rotorua, 15/5/55, first full song. Common over the whole of the volcanic highlands in all types of habitat. (M.S.B.) Opoho, Dunedin, 19/9/54, total song output for one day was 182 songs, with a peak between 8.30 and 9 a.m. (J.W.)
- PIPIT** (*Anthus novaeseelandiae*). Widely distributed over the whole of the volcanic highlands. (M.S.B.) Manapouri-Te Anau, commonly seen on 'Wilderness Flats'. (W.A.W.)
- STITCHBIRD** (*Notiomystis cincta*). Little Barrier. 6-12/55/54. Several seen and heard. (E.F.T., A.T.T.C.)
- BELLBIRD** (*Anthornis melanura*). Kawau, Mansion House Bay. 5/2/55. Heard. (A.J.G.) May be found in every sizable patch of bush on the volcanic highlands. Frequent visitor to Rotorua town between Jan. and Sept. (M.S.B.) Minginui. Seen daily; winter, up to 60; summer and autumn, up to 12/ (April 220); estimated 3 present for every 1 seen, and 2 to 1 Tui. Food: fuchsia and the fruit of the wineberry, karamu, kahikatea, hawthorn and puta-puta-weta. Song with that of the Tui was deafening while they were on heavily fruiting kahikatea. (R.StP.) Taupo.

- Common all round the lake. (A.A.) Ahimanawa Range. Many at 3000ft. (M.J.B.) Palmerston North Esplanade. 31/7/55. (I.G.A.) Mt Arthur Range. Numerous. (M.J.B.) Sheffield. 20/12/54. 2. (T.J.P.) Franklin Mts. 8/5/55. Reported to be numerous. (O.S.) Winton. 10/6/55. 2 at honey pots in garden for first time. (N.S.) Centre I. 20/10/54. 1, reported unusual here. (O.S.) Manapouri. Some. (W.A.W.) Bluff hill. 16/5/55. Several. (R.B.S.)
- TUI** (*Prothemadera novaeseelandiae*). Clevedon. 19/12/54. Nest with 2 chicks 25ft up in *C. macrocarpa*; Tuie nested in adjacent tree last year. (A.J.G.) Rotorua. Common in State forest when gums are flowering. (M.S.B.) Taupo. Common round the lake. 'Four years ago, when I first came to Taupo, Bellbirds were in the majority in the gardens, but latterly the Tuies have been in the ascendant.' (A.A.) Minginui. Fewer in winter, but up to 100 seen daily in summer and autumn; seen to feed on fuchsia, cabbage tree, hawthorn, wineberry, puta-puta-weta, kahikatea, and also on cicadas. 18/4/55, 20 feeding at once on one hawthorn tree. (R.St.P.) Ahimanawa Range. Present at 3000ft. (M.J.B.) Palmerston North Esplanade. 11/5/55. First for year on flowering gums. (I.G.A.) Manapouri. Some. (W.A.W.) Bluff hill. 16/5/55. 2. (R.B.S.) Stewart I. 22/10/54. Most plentiful bird seen. (R.M.J.) Very abundant. (R.J.S., K.J.W-M.)
- SILVEREYE** (*Zosterops lateralis*). Little Barrier I., July '54, large flocks for a few weeks; usually scarce on the island. (C.H.P.) Clevedon, 16/8/54, partial albino, mostly creamy, reported by Mrs A. R. Browne. (H.R.McK.) Minginui, Aug.-Dec., none seen; Jan.-Feb., up to 15 in a day; March, 90; April, 200; May, 300; June, 400; July, 250; seen to feed on fruit of wineberry, karamu, puta-puta-weta and hawthorn. (R.St.P.) Rotorua, 7/7/55, many in chestnut trees preying on a small brown insect; the winter irruptions were the largest for many years. (M.S.B.) Mt Arthur Range, numerous. (M.J.B.)
- GREENFINCH** (*Chloris chloris*). Rotorua rather scarce, a few birds in autumn and winter; no flocks noted in recent years. (M.S.B.) Minginui, Aug.-Feb., up to 6 in a day; March, small flocks; June-July, sometimes up to 300. (R.St.P.) Stewart I., reported to feed on black currant bushes. (R.J.S., K.J.W-M.)
- GOLDFINCH** (*Carduelis carduelis*). Clevedon, 6/12/54, nest, 5 eggs, in wattle; 18th, 2 hatched; 19th, 0920 hours 3 chicks, 1645 hours 4 chicks; 20th, 5 chicks; 28th, 2 chicks disappeared; Jan. 2, 2 flew from nest but returned for night; 3rd, 3 flew from nest. (H.R.McK.) Moumoukai, a few small flocks; all finches now decreasing as fern takes charge in waterworks reserve. (J.W.St.P.) Common in summer and autumn, becoming scarcer in the winter when there seems to be a movement down to the coast. (M.S.B.) Minginui, Aug.-Nov., none; Dec.-Feb., small flocks; May-June, up to 300 in a day in flocks; July, decreasing. (R.St.P.) Stewart I., common. (K.J.W-M.)
- LESSER REDPOLL** (*Carduelis flammea cabaret*). Parengarenga, 1/2/55, a few. (R.B.S.) Poutu Peninsula, 30/7/55, 2. (A.J., J.P.) Dome Valley, Warkworth, 16/11/54, 8. (A.G.G.) Common and increasing over the whole of the volcanic highlands. (M.S.B.) Minginui, 5/3/55, c. 60; 30/5/55, c. 200; 1/6/55, 12; 3/7/55, c. 2000; 17/7/55, c. 300. The two latter flocks were seen only once. Other than the flocks, only a few odd birds were seen in the year. (R.St.P.) Clevedon, Moumoukai, 3/10/54, c. 12. (H.R.McK.) Okura, S. Westland, 22/10/54, very common. (A.B.)
- CHAFFINCH** (*Fringilla coelebs*). Mairangi Bay, 10/3/55, broken song; no more till 26/7/55; by 30/7/55 many in full song. (H.G.W.) Minginui, song started properly by Aug. '54 and ceased in mid-Feb.; 17/7/55, part song. (R.St.P.) Manapouri, commonest bird seen. (W.A.W.)

YELLOWHAMMER (*Emberiza citrinella*). Parengarenga, not a common breeding birds in the far north. (R.B.S.) Rotorua, in autumn fairly large flocks appeared, usually contemporary with Chaffinch movements. Also seen feeding with Sparrows in the streets. (M.S.B.) Minginui, '54-'55, only odd birds, no flocks; numbers increase as Rotorua is approached. (R.StP.) Stewart I., a few. (R.J.S., K.J.W-M.)

HOUSE SPARROW (*Passer domesticus*). Opoho, Dunedin, 24/2/54-21/5/54. An albino was off-white in February and almost yellow in May. (W.A.W.)

STARLING (*Sturnus vulgaris*). Minginui. Aug.-Dec., up to 150 in a day; Jan.-Feb., fewer; March-June, mostly in two big flocks of c. 500 and c. 2000 feeding on a heavy crop of kahikatea fruit; July, up to 300, the main lot having left; Aug., looking at nest sites; Nov., removing hatched egg shells. (R.StP.) Glink's Gully. 17/7/55. Nest with young. (R.B.S.)

MYNA (*Acridotheres tristis*). Bay of Islands, odd birds reported. (K.C.B.C.) Wellsford, 3/11/54, first seen, now steadily increasing. (A.G.G.) South Kaipara Heads, first seen Oct. '55. (M.A.W.) Parakai, Jan. '55. (R.B.S.) Remuera, heard and seen with increasing frequency at all seasons. (J.C.D.) Tauranga, a rapid increase all over the district. (B.S.) Ngongotaha, 7/7/55, c. 35 near railway yards; some now seen daily. (R.E.W.F.) Now widely distributed over volcanic plateau; but not yet at Taupo. (A.A., M.S.B.)

ROOK (*Corvus frugilegus*). Gisborne. 10/5/55. 1. (A.B.)

WHITE-BACKED MAGPIE (*Gymnorhina hypoleuca*). Piraka, Taumarunui, May '55, 2; Erua, 2 pairs. (A.McG.P.)

KOKAKO (*Callaeas cinerea wilsoni*). Moumoukai, Clevedon. Plentiful in some parts, but seems to have left some outer pieces of bush. (J.W.StP.) Kawhia, head of Kawaroa stream. Odd ones seen by R. H. Meredith. (W.S.S.) Reports based upon two specimens which reached the Auckland Museum (through Department of Internal Affairs) have established the presence of Kokakos in two areas: (1) heavily forested ranges about 6 miles to the west of Ngaruawahia, 3/7/53 (more were seen); (2) the large forest area of the Tutamoe Range, Waimatenui district, North Auckland, 29/8/53, 'on top of the range in dense scrubby bush'. (E.G.T.)

ANNUAL LOCALITY REPORTS

Following a suggestion made at the Annual General Meeting and reported in *Notornis*, Vol. 6, No. 6, localities which are of especial interest because of the large numbers of migratory birds which visit them, have separate reports for themselves. It is hoped that this system of annual locality reports may be extended.

Records for the Firth of Thames were collated by H. R. McKenzie and R. B. Sibson. Manukau Harbour has been divided into three areas: (a) Upper Manukau, extending from Puhea Creek, and the Onehunga-Mangere Bridge to Otahuhu and Westfield; (b) Puketutu flats - Ihumatao; (c) Karaka-Weymouth-Puhinui (H.R.McK., D.A.U., R.B.S.).

REPORT FOR MIRANDA COAST, FIRTH OF THAMES

PIED SHAG. A few penetrate the Firth as far as Waitakaruru and Thames.

WHITE-FACED HERON. One near Waitakaruru on 3/4/55.

PARADISE DUCK. 1 female on Miranda pools 12/6/55.

SHOVELER. 1 female on pools 30/1/55. 1 male on Miranda creek 12/6/55.

BANDED RAIL. 1 pair seen with young just hatched, 10/9/55.

S.I. PIED OYSTERCATCHER. c. 19 summered. By the end of January numbers were up to 300 and on 11/4/55 there were c. 640. 600 plus wintered.

BLACK OYSTERCATCHER. 12/12/54, 2 at Miranda; 1 at Kaiaua between 11/4/55 and 10/7/55.

PACIFIC GOLDEN PLOVER. 12 on 27/12/54. 39 on 27/2/55, of which 7 were in well advanced breeding dress.

BANDED DOTTEREL. The number of pairs breeding on this stretch of coast appears to be decreasing.

NEW ZEALAND DOTTEREL. Kaiaua, 1954 - 55, present all year, up to 8. Nests found, 2/10/54, 3 eggs, later washed out; 14/11/54, 3 eggs, robbed later in day; 15/1/55, 3 eggs, chicks hatched and were ringed on 12/2/55. These three nests almost certainly belonged to the one pair. 14/11/54, beach to south, 1 egg, later disappeared. (H.R.McK. *et al.*)

LARGE SAND DOTTEREL. 1 was seen by many observers on a number of occasions between 9/11/54 and 27/2/55.

WRYBILL. c. 70 on 17/10/54 but only 20 are known to have summered. Migrants were already returning in December. Numbers on 1/1/55 were 180; and on 27/2/55, 2000 to 2500 were estimated to be present in two flocks. Most of these are likely to have wintered. c. 680 on 10/9/55.

LONG-BILLED CURLEW. 1 on 12/6/55. 2 on 10/7/55; 1 seen eating crabs; later both flew and with much calling made passes at a harrier.

BAR-TAILED GODWIT. Many thousands as usual through the summer. c. 1600 wintered.

TEREK SANDPIPER. 1 seen on a number of dates between 9 Nov. and 27 Dec. was probably the bird which wintered in 1954.

TURNSTONE. 5 on 2/10/54, 7 on 17/10/54 and 27/2/55, 2 on 11/4/55.

KNOT. The summer of 1954 - 55 was a very good one. The numbers ran into some thousands, perhaps 7000 at the peak. c. 1400 wintered.

SIBERIAN PECTORAL SANDPIPER. 2 on 2/10/54. At least 3, perhaps 6, had returned to the pools by mid-October. 17 on 1/1/55 and 27/2/55. 8 on 3/4/55. 6 on 11/4/55. These lingered later than usual.

AMERICAN PECTORAL SANDPIPER. 1 was recorded on the usual pools several times between 9/11/54 and 12/2/55.

CURLEW SANDPIPER. 2 on 17/10/54 and 27/2/55, 1 pale, 1 reddening.

RED-NECKED STINT. 6 on 27/12/54, 4 on 11/4/55, 1 on 26/6/55 and 10/9/55.

PIED STILT. Several nests had full clutches of 4 by mid-September. There were the usual gatherings of non-breeders. In late summer there was the usual influx, but the numbers of wintering Stilts appeared to be considerably smaller than in previous years.

ARCTIC SKUA. 3 chasing White-fronted Terns off Miranda on 14/11/54.

BLACK-BACKED GULL. The two colonies at Kaiaua mangroves and Wrybill Reach are flourishing. Less successful are odd pairs which attempt to nest elsewhere.

RED-BILLED GULL. As usual a few remained throughout the summer. Plentiful in winter.

BLACK-BILLED GULL. c. 450 still present on 18/9/54, c. 54 on 2/10/54. 1 adult on 15/1/55, but by 11/4/55 c. 240 had returned. c. 400 on 28/5/55, 460 plus on 12/6/55, 580 plus on 26/6/55. On 10/7/55 there was a record count of c. 100 at Kaiaua and c. 900 at Miranda.

CASPIAN TERN. A few non-breeders remain for the summer. Winter numbers may run into hundreds. A young bird ringed as a nestling at South Kaipara Heads in November '54 was found dead at Miranda in winter '55.

WHITE-FRONTED TERN. There were three colonies. Near White Bridge 22 nests held one egg, and two nests two eggs each on 20/11/54. A big tide overwhelmed this colony. Near the now dismantled limeworks a small colony had started and two eggs were laid by 14/11/54. On 27/12/54 there were over 50 birds at this colony and at least 12 nests with eggs. At Wrybill Reach on the big shellbank 2 flying young of the year were seen on 27/12/54, perhaps the only survivors of the big tide; and there were 35 new nests, 34 with 1 egg and 1 with 2 eggs. Very few young were raised.

REDPOLL. 40 plus at Kaiaua on 12/6/55.

MANUKAU - (a) UPPER MANUKAU

GANNET. 10/5/55, 20 plus above the bridge.

PIED SHAG. 8 on 30/10/54. 18 on 14/9/54 at Onehunga.

LITTLE BLACK SHAG. A flight of c. 30 Shags in line on 23/4/55 appeared to be of this species. On 6/5/55 there were c. 12 and on 10/5/55 9 on the breakwater at Puhea Creek. The status of this bird in Manukau is unknown.

LITTLE EGRET (*E. garzetta*) (v. *Notornis*, 5, 77). This bird, which evidently wintered in Upper Manukau, was last seen on 8/9/54. Mr P. A. A. Stein was informed that its regular night roost was in a narrow sheltered well-wooded gully below Hillsborough.

REEF HERON. 2 in Puhea Creek on 9/9/55. Not recorded in recent years above the bridge.

S.I. PIED OYSTERCATCHER. Summering was proved for the second year, e.g. 29 on 31/10/54, 23 plus on 23/12/54. On 31/12/54 the high tide drove c. 30 up into a ploughed field near Tararata Creek. Numbers increased from January. 82 on 24/7/55. c. 150 on 10/8/55 was the biggest count so far for this area.

N.I. OYSTERCATCHER. One was present all summer, '54-'55, with S.I.P.O. 2 on 24/7/55 and 3 on 7/10/55.

ASIATIC GOLDEN PLOVER. 1 at Favona causeway on 24/11/54.

WRYBILL. Favona causeway. 5 on 23/12/55. 25 on 4/1/55. 4 on 13/2/55. 22 on 25/5/55. These birds are probably from the Puketutu flock. On 5/3/55 a high tide drove a flock of c. 50 over the high stone wall which surrounds Waikaraka Park, and they settled on the turf while cricket was being played. (J.C.D.)

BAR-TAILED GODWIT. 2000 plus summered; few were seen between the end of March and mid-September.

BLACK-TAILED GODWIT. One, probably Hudsonian (*haemastica*) was seen flying low at some distance at Harania Creek 30/10/54 and 24/3/55. The colour of the underwing could not be seen. The black and white tail was conspicuous.

KNOT. 3 on 31/10/54. 50 plus on 19/11/54. 120 plus on 22/12/54. 500 plus on 4/1/55, the largest flock so far recorded in this area. 200 plus on 24/3/55.

STILT. As usual some hundreds of non-breeders summered, e.g. 600 plus on 17/9/54 and 400 plus on 30/10/54. The winter population (1955) was 2500-3000. An almost black stilt was noted on 17/3/55 and 24/7/55.

BLACK-BACKED GULL. Great numbers of all ages are attracted by the outfall of meatworks, tanneries, etc.

RED-BILLED GULL. Winter numbers probably 10,000 plus.

WHITE-WINGED BLACK TERN. 1 at Harania Creek at least from 30/10/54 to 24/3/55 (v. *Notornis*, 6, 159-160).

CASPIAN TERN. Usually a few.

WHITE-FRONTED TERN. A very rare bird here. One near the bridge on 25/4/54, the only one recorded in recent years.

MANUKAU — (b) PUKETUTU

ANTARCTIC PRION (*P. desolata*). 2 came ashore towards the end of May.

BLUE HERON. 3 present in April and May.

BANDED RAIL. Not infrequently seen near the approach to the causeway.

PIED OYSTERCATCHER. Odd birds were seen from time to time; the only big count being of c. 110 on 24/7/55. There was no permanent wintering flock here. Upper Manukau now seems to be preferred.

ASIATIC GOLDEN PLOVER. 4 on 4/1/55, 10 on 29/3/55.

BANDED DOTTEREL. c. 350 on 25/1/55, c. 80 on 11/6/55, 7/7/55 and 24/7/55, up in Ascot paddocks.

WRYBILL. 2 on 19/10/54 were in poor plumage. By 4/1/55, 48 had returned. On 25/1/55, 350 plus flew inland and settled very conspicuously on a recently ploughed paddock of rich red-brown soil near Ascot. Such behaviour is unusual. Not far away on short pasture was a flock of about the same size of Banded Dotterels. 440 on 13/2/55, c. 500 on 30/4/55. On 24/7/55 a count of 660 was checked by several observers. 600 plus were reported by H.R.McK. on 14/8/55.

LONG-BILLED CURLEW. The first to be recorded in 16 years' watching was seen on 10/5/55.

BAR-TAILED GODWIT. As usual numbers were at their greatest, 5000 plus in February and early March. Some hundreds wintered in 1955.

KNOT. As with Godwits, February and March are the peak months, e.g. 1000 plus 13/2/55 and c. 3000 on 2/3/55. Very few wintered.

TURNSTONE. 40 on 4/1/55, 5 on 13/2/55, 6 on 29/3/55.

RED-NECKED STINT. 1 found among the Wrybills on 30/4/55 stayed for the winter. It was last seen on 24/7/55.

PIED STILT. Few had returned by the end of January, c. 200 were back on 18/2/55; and the winter population as usual was c. 400. On 10/8/55 not a single Stilt could be seen.

CASPIAN TERN. Up to 20 juveniles were present throughout the spring. The usual influx began in December. On 13/2/55, 90 - 100 were counted. 60 plus wintered.

MANUKAU — (c) KARAKA - PUHINUI

GANNET. 10 plus in Papakura Creek on 7/5/55. As many as 60 have been reported fishing this long wide creek above the narrows at Weymouth.

WHITE HERON. Papakura Creek. Probably 2 wintered; 2 reported roosting in pine mid-May; 1 frequently seen July; 2 on 8/8/55. (H.R.McK.)

WHITE-FACED HERON. 2 appeared in mid-April. 1 seen on 8/7/55, up Wiri Creek. (D.H.B.) 4 at Karaka on 24/7/55.

S.I. OYSTERCATCHER. c. 70 summered '53-'54. 550 plus on 21/3/54. c. 125 on 11/12/54 were summering. 600 plus on 25/4/55.

N.I. OYSTERCATCHER. 2 (pied form) at Puhinui on 16/10/54. 2 (dark phase) on 24/7/55.

ASIATIC GOLDEN PLOVER. The Karaka coast remains a favoured locality. 8 on 11/10/53, 45 on 21/3/54, 36 on 3/4/54, 48 on 10/2/55.

BANDED DOTTEREL. A rare breeding bird in Manukau. 1 pair bred Oct. '53. 8 were about in Oct. '54. c. 80 on 21/3/54, c. 60 on 24/7/55.

N.Z. DOTTEREL. 1 to 4 usually to be seen on the Karaka shellbanks.

WRYBILL. The Karaka coast is now a stronghold of this species. 222 still present on 21/9/53; 92 on 11/10/53; 17 on 25/10/53 may have been summering. c. 440 on 3/4/54, c. 230 on 29/8/54; 8 on 11/12/54 were evidently summering. c. 515 on 10/4/55; c. 720 on 24/7/55 at the same time as c. 660 were being counted at Puketutu. 130 plus on 2/10/55.

ASIATIC WHIMBREL. 1 seen on 21/3/54, 29/8/54 and 26/9/54 may have wintered. 2 on 11/12/54.

BAR-TAILED GODWIT. c. 1400 on 21/9/53, of which the majority had wintered. c. 4000 on 11/10/53, 6000 plus on 25/10/53. Many again wintered in 1954, e.g. c. 1000 on 29/8/54, c. 1700 on 26/9/54, 5000 plus on 18/10/54, c. 7000 on 11/12/54. 1000 plus wintered in 1955. 6000 plus on 2/10/55.

BLACK-TAILED GODWIT. 1 seen on 10/7/55 and 3/9/55, probably *haemastica*, may well have been the same bird as seen twice in Upper Manukau.

TURNSTONE. 76 on 20/9/53. 130 plus on 11/10/53. Many present all summer. 120 plus on 21/3/54. 31 on 7/6/54. 50 plus on 29/8/54. 72 on 26/9/54. Probably some scores throughout summer. 24 on 7/5/55 were thought to be wintering, but none could be found on 10/7/55 or 24/7/55. 42 on 2/10/55.

KNOT. c. 300 on 3/4/54. 4000 plus on 10/2/55. c. 1250 on 10/4/55. c. 1000 on 25/4/55. c. 500 on 7/5/55, but only c. 50 are known to have wintered; and there were still only c. 50 on 2/10/55.

SHARP-TAILED SANDPIPER. 1 on 21/9/53. 5 on 16/1/54.

RED-NECKED STINT. 1 on 10/7/55 and 2/10/55.

PIED STILT. Immature non-breeders on this coast tend to concentrate in Yates' Creek between September and December, e.g. 20 on 11/10/53. A winter count for the Karaka coast was 1420 on 24/7/55. But not a single Stilt could be found on 2/10/55, though there was a great gathering of other waders. Yates' Creek was not visited. c. 110 on 24/7/55 at Puhinui is a typical winter count for that coast. A smudgy Stilt not wholly black was seen on 24/7/55.

BLACK-BILLED GULL. 1 seen at Karaka shellbanks on 10/7/55. The only other Manukau record is of one at Puhinui September-October 1945.

CASPIAN TERN. A few dozen non-breeders remain during the breeding season. There is an influx in the New Year. 150 plus on 25/4/55 was an exceptional count for one roost.

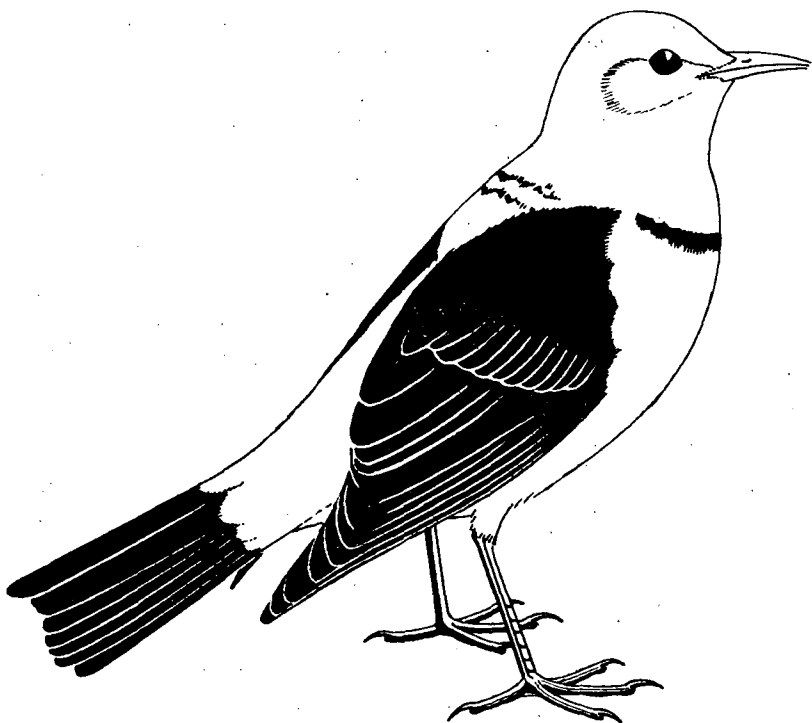
WHITE-FRONTED TERN. A few usually come up the Channel into Papakura Creek in late summer and autumn and D.A.U. has seen as many as 100. c. 1500 on 24/7/55 at Clark's Beach was quite exceptional.

AN UNUSUAL CASE OF ALBINISM IN A BLACKBIRD

By D. H. BRATHWAITE

Albino blackbirds are said to be not rare, and birds with varying amounts of white in the plumage even more common, though the bird depicted in the accompanying sketch was the first of either type ever seen by the writer. It may be unusual for the distribution of black and white on a partial albino to be so symmetrical, and the following notes and sketch may be of interest. The bird was first seen at the top end of Tennyson Street, Napier, on 2 September 1953. It was obviously a male, and when seen appeared to be engaged in a territorial display with a normal male. Subsequently it was seen fairly regularly in the same locality over the next three months. It was not seen during the first three weeks of December, 1953, but again appeared on the 23rd, this time singing on an exposed branch of a macrocarpa tree. It was reported as having been seen a few weeks later, but the writer has seen nothing further of it.

As will be seen from the sketch, it had a white body except for an irregular black band on the chest and two narrower broken bands across the shoulders; the wings and tail were black and the bill and legs the normal colour.



REVIEW

Dispersal of Introduced Birds from New Zealand (Ibis 95, 676-692),
by G. R. Williams, 1953.

This well-organised paper goes some way towards filling a long-standing gap in the literature of the introduced birds, which have now become generally an inescapable part, and in some instances a dominant part, of the avifauna not only of the mainland but also of the outlying islands.

The task of the reviewer has been simplified by the author, whose summary of his paper is quoted in full:

'1. Of the numerous European passerines (of British origin) liberated in New Zealand and Australia, mainly between the years 1860 and 1870, 13 are now established in New Zealand proper (North, South, and Stewart Islands) and 8 in Australia (including Tasmania).

2. Within 30 to 40 years of their liberation many of these established species began to appear on the small islands in Australasian seas that (with one exception) lie between 200 and 550 miles from the main land masses.

3. Although it is known that in a few cases introductions were made by man, it seems likely that in most cases the birds were self-introduced.

4. The number of European species breeding on any one island varies from one in the case of Macquarie Island, which has the severest climate and the smallest variety of habitat types, to 10 – or perhaps 11 – on Chatham Island.

5. Dispersal seems to have been brought about by the birds being carried by the strong winds of these latitudes, and New Zealand appears to have been the main centre for this dispersal.

6. It is suggested that the chances of establishment on any one island have been governed by the potential frequency of arrival and the number of empty ecological niches in the new habitat. With such a poor native passerine avifauna as exists in the New Zealand region, empty ecological niches are apparently many.

7. There is no evidence that competition between indigenous and foreign passerines has occurred within New Zealand itself or on the offshore islands.

8. The Starling has the most widespread distribution – having appeared on all 9 islands and being known to breed on at least 7. The least "successful" species appear to be the Dunnock, Skylark and Yellowhammer.'

Inevitably there are some minor points of criticism. Is it true for instance to say (p. 677) that the Dunnock is 'not abundant anywhere'; when at some seasons in large tracts of country, e.g. scrub and lupin-covered sandhills, it can be the dominant singer? The reviewer's opinion is that its general density is now rather higher in New Zealand than in Britain or Europe. The Cirl Bunting, described as 'nowhere common' (p. 677), was plentiful enough in the early 1940's in the limestone country inland from Oamaru. Do Skylark and Pipit really have (p. 682) 'rather similar habitat requirements'? At any rate on the smaller islands of the Hauraki Gulf, Pipits frequent cliffs and steep faces where no one would expect to find a Skylark; and in the lush well-farmed pastures e.g. of the Waikato, where it is hard to find a single Pipit, Skylarks abound.

It is a little surprising to see the Dunnock placed among the least successful species; for Dunnocks have reached Campbell Island and are presumably capable therefore of reaching any of the other outlying islands. They are a species which is easily missed. Their ecological requirements are modest and seem to be satisfactorily met, for example, either by the alpine scrub at 4000 feet on Egmont and Ruapehu or by a patch of straggling taupata on a rocky island otherwise given over to Gannets, White-fronted Terns and an odd pair of cliff-nesting Starlings. Climatic conditions and 'the nature of the beast'

probably explain why the Yellowhammer has not colonised the southern outliers, but has appeared on Lord Howe and the Kermadecs. In winter Yellowhammers wander about the islands of northern New Zealand. Turbott and Buddle (Rec. Auck. Inst. Mus., Vol. 3, pp. 319-336: 1948), in a valuable paper which the author should have consulted, reported them at the Three Kings; they are well established on the Cavalliş (Sibson, *Notornis* 5, p. 114), and in August 1955 a small flock was present on Mokohinau.

The author is careful to emphasise that colonizing is still in progress. Ornithologists who visit either offshore or outlying islands should carefully note the presence of non-native species. All serious students of New Zealand ornithology should read this very informative paper.

R.B.S.

NOTICES

SPECIAL GENERAL MEETING

The Special General Meeting called for 8 November 1955 took place in the library of the Auckland War Memorial Museum. There was an attendance of twenty.

On the motion of the President, it was decided to raise the subscription for ordinary members from 7/6 to 10/-, the subscription for endowment members from 10/- to £1 per annum, and the cost of life membership from £6/6/- to £10, as from 31 March 1956. After some animated discussion, it was decided that the subscription for junior members should remain at 5/-.

When the formal business was concluded, coloured slides and films locally taken of sea- and shore-birds were shown by Miss N. Macdonald, and Messrs Beatson, Prickett and Urquhart; and through the courtesy of Dr Falla a Canadian film showing Spotted Sandpiper, Barrow's Goldeneye and Sora Rail was presented.

RINGING FUND

A Ringing Fund has been set up by the Council to help pay for future supplies of rings so that the Society can fairly claim to own its own scheme and thus deserve future help from Internal Affairs. To charge the individual for rings which he uses would involve much work for the convener and would be unfair to the enthusiastic operator of modest means. Under the present scheme those operators who use appreciable numbers of rings are asked to make a donation which they feel is within their powers, and even non-ringers may wish to encourage this aspect of the Society's work. Donations should be sent to the hon. treasurer. The Society gratefully acknowledges a new grant of £25 from the Department of Internal Affairs to purchase rings. The Department states: 'The grant has been made in view of the value of the ringing scheme to research into ornithology in New Zealand.'

LIBRARY

The Council has appointed Miss Enid A. Evans, B.A., A.L.A., as the Society's Hon. Librarian in place of E. G. Turbott, who resigned on account of pressure of other work. This post is not one of the elective offices of the Society, but an appointment made by the Council. Miss Evans, who is the Librarian, Auckland Institute and Museum, had already done much work for our Library. As she is a professional librarian the Society is doubly fortunate to secure her interest, and thanks her for consenting to accept this position.