in short referred to as Bobwhite (Stoddard, 1931; Checklist of North American Birds, fifth edition, from the manuscript belonging to Dr F. C. Lincoln).

It is suggested that this bird in future be called Bobwhite Quail to accord with its name in its country of origin, to avoid misunderstanding, and to facilitate location of literature references.

ACKNOWLEDGMENTS

I am grateful to Dr R. A. Falla, Director of Dominion Museum, Wellington, for making available the study skins kept in the museum; to Mr H. W. Axbey, Rotorua, who arranged that the two Bobwhite Quail shot at Wairoa were preserved; and to Dr John W. Aldrich, of the United States Fish and Wildlife Service, Washington, D.C., for reading the manuscript, helpful suggestions and the loan of study skins.

SUMMARY

The Bobwhite Quail introduced to New Zealand now only persisting in scattered populations in the Wairoa-Waikaremoana area, belong to the western prairie form, the Plains Bobwhite, Colinus virginianus taylori Lincoln. The introduced birds came from Kansas and/or the old Indian Territory around 1900. This bird ought in future to be called Bobwhite Quail and not Virginian Quail.

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THE WHITE HERON (Egretta alba) IN NEW ZEALAND

An inquiry based on available records 1951-54

By H. G. WARBURTON

This report has been written up from the observations and notes of many people throughout New Zealand that were collected and sorted out by Mr D. Brathwaite, Napier, then handed on to me to see what information I could sift from them. In its present form, this could act as a pilot inquiry into the status and general movements of the White Heron throughout New Zealand. From the details of observations and dates, I have arranged a summary for each year, month by month, as follows:

White Herons reported elsewhere than at Okarito throughout N.Z. 1951-54

	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec
1951	0	6	10	12	11	16	12	15	12	7	1	1
1952	5	2	4	16	82	52	62	16	14	21	17	6
1953	0	1	1	5	9	17	14	28	21	17	2	0
1954	0	0	1	3	17	13	13	1	10	2	0	0

The reports available to me have been carefully assessed in order to eliminate as far as possible duplicate reports sent in from a district during one period which almost certainly referred to the same bird. However, it is obvious that the reports are quite likely to include observations on the same individual, as a bird may cover a good deal of ground in a short time, and such movements are difficult to check. It is hoped that the summary at least

gives a general indication of annual occurrence.

Sometimes the period of residence in a locality has not been reported as such — only the date first seen — so that totals for some months should be slightly higher than shown. Nevertheless, there appear to be more reports made during the winter months when there is a general dispersal over New Zealand. Yet even these totals do not reach a figure nearly as high as would be expected from breeding information. In other words, there may be many White Herons that live unreported during the months of dispersal.

White Herons that live unreported during the months of dispersal.

I have been in communnication with Dr Falla regarding White Herons in general, and his information on the breeding colony at Okarito has enabled me to make comparisons with that from observers throughout New Zealand:

'The cycle of occurrence is roughly the same each year, some ten pairs of herons returning to the nesting place some time in September . . . and

are joined later by (another) two pairs of herons."

I assume that during October there would be usually about 24 adult herons at Okarito, and that those reported from other parts at that time could be non-breeders. It is interesting to note that not many herons were reported during the period November to February of each year. Yet those reported for October must have been around during that period and even later.

When could one expect the young herons to be flying, and, roughly, how

many would there be?

'The young are reared successfully from about a dozen nests, an average of two per nest being the maximum of survival to flying stage. It is practically certain that young birds one year old do not return to Okarito. The first of the nestlings can fly by December, and the colony is deserted by mid-January.'

On the basis of Dr Falla's information, the greatest number of herons throughout New Zealand should be, I think, soon after the young have dispersed – i.e. February to April. In order to arrive at an assumed population for this particular period of the year, I have taken the October reports of the previous year (non-breeders) plus the known 24 breeders, and, say, ten or more young, to make a table as follows:

Assumed greatest population of White Herons throughout New Zealand soon after dispersal months

Year	Oct. reports (non-breeders)	Breeders and young	Feb April year following
1951	7	34	41
1952	21	34	55
1953	17	34	51

According to Dr Falla the size of the breeding colony has remained the same for many years. Thus it appears that either there must be a very high mortality soon after leaving the colony amongst the young reared, or the available reports are very incomplete. As regards the young reared each year,

Dr Falla says: 'Theoretically there could be between thirty and forty of them . . . of perhaps three age groups . . . (that) remain dispersed . . . and a sizable nomadic flock.

In order to fill in the gaps of information, we now require over the next few years greater numbers of regular reports on White Herons in as many areas as possible - or for those sending in annual bird reports to say whether or not (nil reports can be quite useful) White Herons have been in their

Although a large number of herons may have passed unreported, it is significant that during May 1952 a large number of reports were forwarded through regional organisers. I assessed the number of reliable and unduplicated reports throughout New Zealand as 82, but there were very likely many more herons around at that time. General opinion was that there must have been a sudden 'invasion' of herons - but from where?

It will be noticed that the number of reported herons dropped towards November, and one would have expected more to have shown up at Okarito. On this point Dr Falla says:

You may take it as definite that there has been no significant increase in

any of the seasons 1941-1955.

One of the places where a flock of White Herons showed suddenly was at Rangaunu Bay, near Awanui, Northland. A local fisherman, Mr T. Walker, informed me that during about fifty years he saw only an occasional lone White Heron during the winter of almost each year. During winter 1952 up to 18 in a flock were seen regularly by Mr Walker, and also by Mr R. Michie, of Kaitaia, while another fisherman reported seeing 23 at one time. From about October onwards they were not seen on the harbour. Here, then, was one large flock that just vanished, or went unreported for some months, the breeding months.

By June of 1953, White Herons were again reported at Rangaunu. I watched regularly and collected reports on the movements of a flock varying at times from 11 to 14 White Herons. From information given me by Messrs T. and W. Walker, and Mr R. Michie, this flock appeared to move about and feed on exactly the same grounds as the flock of the previous year. Could one assume any connection between the two flocks? If so, where had they been hiding? We talked of the possibility of another breeding place. In correspondence, Mr D. Brathwaite suggests an opinion along the lines that, if the birds showed up originally from 'somewhere', then they could quite well have returned there for a period, and have shown up again at Rangaunu the following year.

One significant point to me was that all reports, and my own observations of these flocks each year, showed them to move about always as a flock. Now I understand that Australian White Herons do move about in flocks sometimes during the months after dispersal, i.e. the winter months. But concerning White Herons established in New Zealand, Dr Falla has this to say: 'The ordinary dispersal pattern of White Herons from Okarito does not

appear to include flocking at any stage, except for the occurrence of larger groups in Westland in the early stages of dispersal.'

By November 1953 the flock at Rangaunu had left, but again there was no increase in the numbers at Okarito, nor reports of a flock elsewhere (something to be expected, since the appearance of a single bird in an area sometimes causes notice).

In the winter of 1954 some White Herons showed up again at Rangaunu, ten being the greatest number seen at any one time by Mr T. Walker. These were again feeding in the same places as before. It was about this time that Mr W. Walker reported seeing a smallish White Heron on the sand-bar of Rangaunu Bay. This was later identified by Mr H. R. McKenzie as a Little Egret (Egretta garzetta) and reported in Notornis, Vol. 6, No. 3.

In order to check that this newly reported Little Egret was not the one reported a little earlier at Manukau Harbour, I arranged with Mr J. Prickett to look for the latter one on the same day I returned to Rangaunu Bay. The Little Egret at Manukau was still there, and by this time there were two Little Egrets at the sand-bar of Rangaunu Bay. The most reasonable assumption of the origin of these birds is Australia, and I suggest their presence as a likely clue in unravelling the mysterious comings and goings of the White Heron flocks on Rangaunu Bay.

There are many people to whom thanks are due for the different ways that they have helped with the matter for this report. Will they please accept

the thanks of Mr D. Brathwaite and myself.

NORTH ISLAND NATIVE THRUSH OR PIO-PIO (Turnagra capensis tanagra)

By G. E. SOPP

The Native Thrush, or Pio-Pio, is reliably reported once to have been common in bush country from Waikaremoana far up towards East Cape. From reports from further north and from my own experience I am satisfied that it still occupies much the same range, though in small numbers and reduced bush habitat. The retiring habits of this bird, its fondness for thick cover and its similarity to the Song Thrush (*Turdus ericetoram*) make identification difficult. It appears to sing only rarely. An alarm call is very frequently used, but only too often comes from a thicket and does not lead to a sight record.

In many years of working and hunting in the bush I have caught glimpses of thrushes, usually flying low and away from me, some of which I now consider could have been the Pio Pio. The first that I found to be certainly different was at Hopuruahine, Lake Waikaremoana, in 1938. I had followed a deer off the road into the bush when I clearly saw this thrush with white on the underside, a down-curved tail and of a larger size than the Song

Thrush.

In May 1946, on the shore of Lake Waikare-iti, my brother Carl Sopp was watching a flock of Whiteheads (Mohoua albicilla) working through the low growth when he noted two larger birds following them. These answered to the description of the Pio Pio. They stopped close to him, regarded him

steadily, then quietly retired.

Two brothers, David and Henry Odey, trappers and hunters, on 11 November 1952 told H. R. McKenzie of a song, new to them, which they had heard that day several miles north of Lake Waikaremoana. Their description of the song fitted that of W. P. Mead and H. R. McKenzie of song heard by them on the Wanganui River, believed to be Pio-Pio. I have since found that a good population exists where the Odey brothers heard the song.

by them on the Wanganui River, believed to be Pio-Pio. I have since found that a good population exists where the Odey brothers heard the song.

At the edge of a natural clearing far back from Lake Waikare-iti, on 9/4/53, with another brother, Brian Sopp, I was waiting in the evening for deer when a bird, with undulating flight, came from the bush behind and settled on the top of a small bog pine five feet above our hiding place. It sang a beautiful loud clear song, then flew back into the bush. By this time I had been furnished by Mr W. P. Mead, of Wanganui, with a good photo of a mounted specimen of the Pio Pio in the Wanganui Museum, and I knew this fine songster could be none other than it. I had not previously heard the song or anything closely approaching it.

On 9 April 1955 I took four friends, Mr and Mrs W. Holloway and Mr and Mrs Shaler, of Rotorua, for a tramp to the Pio-Pio country. The two men were veterans of the bush. While we were having our lunch in a small clear spot a Pio-Pio gave its alarm call in a thick bush beside us. Another called nearby as if in answer. The first then came out on to the leafy face of the bush only six feet away from us and in full view, where it fed on 'leaf-roller' grubs for several minutes. While obtaining the grubs it supported