A BUSHMAN'S SEVENTEEN YEARS OF NOTING BIRDS

PART D — SHINING CUCKOO AND LONG-TAILED CUCKOO

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(Edited by H. R. McKenzie)

SHINING CUCKOO *(Chalcites lucidus lucidus)*

STATUS AND HABITS

Habitat

This migratory bird occurs in considerable numbers throughout the country and is at home in this area in heavy and light bush, scrub and exotic trees and shrubs.

Flight

The flight is direct, with shallow undulations, which show the beautiful irridescent green of the back. Although it crosses the ocean it does not seem to fly high here, preferring to keep well within reach of cover.

Breeding

I have known the Shining Cuckoo to victimise only the Grey Warbler *(Gerygone igata igata)* but it is reputed to use the nest of the House Sparrow *(Passer domesticus)* and some other small birds. There are many conflicting and unsubstantiated reports and theories as to how it places its egg in the nest of the warbler and whether it feeds its own young at times but I have not observed any of this. I do know that one will feed another, probably when courting and that a cuckoo, apparently an adult, will set up the juvenile call when it sees a Grey Warbler passing by and that the warbler will respond (J. W. St. Paul pers comm.). I do not think that anyone can say that they fully understand this bird or can definitely refute the strange observations that have been made.

Food

Feeding is mostly in fairly close growth. It takes insects, grubs and caterpillars, including the hairy caterpillar of the Magpie Moth, common on the ragwort, which is plentiful here. I think that few if any other birds will eat this caterpillar. Rarely is bare ground visited for food. I have not known this cuckoo to take any vegetable food.

Song

When the Shining Cuckoo first arrives from overseas it sometimes gives only the first half of the whistled song or else the downward

notes only. Soon the full song is given, perhaps when it has recovered from fatigue. It appears to ventriloquize but this may be due only to head movements during song.

From mid-December to mid-January groups of six to ten or more will hold a noisy meeting in one tree, chirping excitedly and fussing about for some time, then leaving two at a time.

It is not unusual to hear one give a very prolonged song at any hour of the night. At 2300, 24 October 1947, an earthquake disturbed the birds and from my hut at the mill I heard 12 Shining Cuckoos calling from different points. Heard also were some Long-tailed Cuckoos *(Eudynamis taitensis)* in the distance and some Pheasants *(Phasianus colchicus)*. Mrs Hetty McKenzie (pers. comm.) has reported a Shining Cuckoo singing on the wing.

Relation to other birds

I have not known other birds to mob it. They apparently regard it as not so harmful as the Long-tailed Cuckoo, so do not fear and resent it.

ANALYSIS OF MONTHLY CHARTS

(Brackets = total birds seen plus estimate of birds heard only).

Proportion seen to heard: 1 seen to 20 heard and not seen.

The following summaries for Tihoi, Minginui and the Waiau are not made according to calendar years but to the seasons of the Shining Cuckoo in New Zealand, i.e., from September to February from 1944 to 1961.

Although I was away for about the last two weeks of December and about the first week in January those two months, though having less count days, still had high counts. This may be because this bird is more active and vocal at this time of year. This applies also to the Long-tailed Cuckoo.

TIHOI

The total of birds seen for the two cuckoo seasons, i.e., September 1944 to February 1946 was 42 (860).

Count days per month for the 12 months of the two seasons averaged 24.80; days seen 2.20; days not seen 22.60.

Daily counts of birds seen ranged from 0 to 3.

Count days totalled 297 and the total birds seen 48, giving an average of 0.16 (3.20) per count day.

Notes on Analysis

The earliest dates for Shining Cuckoo heard at Tihoi were 2 October 1944 and 6 October 1945. The latest were calls in February 1945, undated, and 1 heard on 22 February 1946.

In the earlier years of my note-taking I was recording mostly birds seen and occasionally birds heard until HRMcK asked me to record especially the earliest and latest calls of the cuckoos. Fortunately, except for February 1945 notes had been taken of the calls of the first heard to arrive at Tihoi and the last heard to depart.

These figures could indicate that Tihoi (plus Arataki) would have had fewer birds than did Minginui in later seasons. Tihoi had 23 for 1944-45 and 19 for 1945-46, while Minginui had 13 for 1946-47. However, Minginui then went on from that season to 100, 200 and 300 odd up to 1959-60 and Tihoi could well have gone up similarly for those seasons also.

There were not sufficient records for making a table for Tihoi to show the average of birds seen per count day for each of the 12 months of the two seasons, 1944-45 and 1945-46.

MINGINUI

The total of birds seen for the 15 seasons, i.e., September to February, 1946-47 to 1960-61 was 3050 (64,050).

Count days per month for the 90 months of the 15 seasons averaged 22.40; days seen 10.10; days not seen 12.30.

Daily counts of birds seen ranged from 0 to 17.

Count days totalled 2012 and the total birds seen 3050, giving an average of 1.50 (31.50) per count day.

Notes on Analysis

TABLE 1 — Monthly averages of birds seen per count day during the 15 seasons, September 1946 to February 1961.

Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
0.90	1.65	2.85	2.77 (3.69)	1.15 (1.38)	0.17

The figures for December and January need to be modified as shown in brackets. They had incomplete records owing to my being away for the Christmas holidays for an average of 10 days in December and 6 in January, so that the December average should be at least one third more, i.e., 0.92, making the total 3.69 and January one fifth more, i.e., 0.23, making the total 1.38.

TABLE 2 — Averages of birds seen per count day at Minginui for the seasons shown.

1946-47	0.10	1954-55	2.64
1947-48	0.74	1955-56	1.67
1948-49	1.44	1956-57	1.18
1949-50	2.27	1957-58	2.26
1950-51	1.59	1958-59	2.59
1951-52	1.68	1959-60	2.06
1952-53	1.18	1960-61	0.30
1953-54	1.27		

The 1946-47 season at Minginui was very poor but a steady recovery was made up to 1949-50. It is to be noted that numbers for the early nineteen fifties were quite well maintained, not dropping so badly as in the case of some of the small birds already dealt with for that period (e.g., Whitehead, Rifleman and Pied Tit).

The 1960-61 season shows a distastrous drop:

Sept. 1960, none seen in 29 count days.
Oct. 1960, 25 seen up to 19th, then none in the rest of the 30 count days (5 being spent in the coastal Bay of Plenty).
Nov. 1950, 4 seen in 28 count days.
Dec. 1960, 7 seen in 6 of 18 count days.
Jan. 1961, 0 seen in 26 days.
Feb. 1961, 0 seen in 26 days.

It is to be noted that November, December and January usually provide the highest counts so it seems that, since there was the usual number up to 19 October, the decline for 1960-61 took place in New Zealand, not during migration, or at the winter quarters in the Pacific islands. The cause of the drop is not apparent. The Grey Warbler and other insectivorous birds showed no decline so food was not a factor. Since the drop occurred so soon after arrival here it is possible that a disease was brought from the Pacific islands.

WAIAU

The total birds seen for Waiau for 11 months of the period 1946 to 1961 was 181 (3801).

Count days per month for the 26 months in which trips to Waiau were made averaged 3.00; days seen 1.30; days not seen 1.70. Daily counts of birds ranged from 0 to 12. Count days totalled 79 and the total birds seen 181, giving an average of 2.30 per count day.

Notes on Analysis

The Shining Cuckoo has not shown a tendency to linger longer in February in the Waiau area than at Minginui as the Long-tailed Cuckoo has done to some extent.

SEASONAL RECORDING

Although September has rather sparse records it has been included because occurrences are fairly regular, but I was away in September 1948 and 1949 and in 1958, 1959 and 1960 there were none.

The Shining Cuckoo arrives in this higher country a week or more later than it does at the coast.

March has not been included in the analysis because it can well be termed " out of season." In 1950 it had 3 seen, the last on 20 March, 1953 had 1 on the 26th, 1956 2 on the 28th and 1959 2 on the 21st. All of these were at Minginui and were silent. It could be expected that these would either winter here or die rather than that they would still migrate.

There has been no noticeable outward migration movement noted here so they may filter through to the coast. H. R. and H. M. McKenzie (pers. comm.) were at Muriwai Beach, North Auckland, from 12 to 25 February 1945, where a very large flock was feeding on caterpillar on lupin and was still there at the latter date. During the whole period song was heard only twice, though there seemed to be some hundreds of birds. This must have meant that a particularly late departure would be made. On 10 February 1946, none were found there so migration that year must have been earlier or they may have been congregating elsewhere.

DATES OF FIRST AND LAST SEEN OR HEARD

Many people listen for the first Shining Cuckoo and welcome it as a harbinger of spring. Few note any evidence of its dates of departure.

Table 3 gives such dates as I have been able to obtain for this area. The "out of season" ones are included as I do not know whether or not they would stay or migrate.

TABLE 3 — Dates of first and last Shining Cuckoos

First Seen or Heard	*Last Seen or Heard*	*Date Before Last*
1946 Sept. 17 1	1947 Feb. 22 1	Jan. 14
1947 Oct. 7 1	1948 Feb. ? 1	
1948 I was away	1949 Feb. 14 2	
1949 Oct. 4 2	1950 Mar. 20 1	Mar. 1
1950 Sept. 20 1	1951 Feb. 27 1	Feb. 7. 11, 16
1951 Sept. 23 1	1952 Feb. 11 1	
1952 Sept. 20 1	1953 Mar. 26 1	Feb. 3
1953 Oct. 3 1	1954 Feb. 7 2	
1954 Sept. 29 2	1955 Feb. 20 1	Feb. 16, 18
1955 Sept. 26 1	1956 Mar. 28 2	Feb. 15
1956 Sept. 26 1	1957 Feb. 8 1	
1957 Sept. 29 1	1958 Feb. 28 1	Feb. 4
1958 Oct. 1 2	1959 Mar. 21 2	Feb. 4
1959 Oct. 5 2	1960 Feb. 4 2	
1960 Oct. 4 1	1960 Dec. 16 1	

Where the gap is considerable dates of those heard prior to the last are given in the third column. For instance, the gap in 1947 would be 22 days, so that the bird may be presumed to be one which will not migrate.

Although the song fades considerably in January and ends almost entirely in early or mid-February, the birds are still present and nearing migration. The late February and the March dates shown in Table 3 indicate birds which may be expected to fail to migrate. If these late birds do in fact remain for the winter they may possibly survive by moving to coastal areas which would be warmer than Minginui.

LONG-TAILED CUCKOO *(Eudynamis taitensis)*

STATUS AND HABITS

Habitat

This cuckoo was almost wholly a bird of the native forest but in recent years it has adapted itself to exotic forests also. Its range in the North Island is practically determined by the presence of the Whitehead *(Mohoua albicilla)* which is the main victim of its parasitic breeding habit. The Long-tailed Cuckoo is very secretive and difficult to observe because of its habit of hiding in thick growth, often in high trees.

Flight

Normally, it uses a flapping flight but it will glide a little distance. Its wings are held out at right angles to the body and this, with its long tail, gives it the appearance of a flying cross. These features help to distinguish it from the New Zealand Falcon *(Falco novaeseelandiae)*, which in some respects it otherwise resembles. Its flight is not fast enough to prevent it being fiercely mobbed by Tuis. Wilkinson (1952) recorded two Tuis forcing one down into the sea. After they desisted the cuckoo got up and flew back into the bush. I have heard of another case of one being forced down into a river and getting up again and flying off. Perhaps the lightness of the bird allows it to take off from the water provided it does so before it becomes waterlogged. Here it is not uncommon for it to be forced down to the ground to take refuge in fern or other low growth.

Breeding

The victims of the breeding habit here in the north are mainly the Whitehead and to a lesser extent the Grey Warbler *(Gerygone igata igata)*. I have not known of any other. In the " School Journal " of my young days I remember a picture of a Grey Warbler standing on a young cuckoo while feeding it in the nest. I actually saw this happen by the Wanganui River, the two Grey Warblers bringing food as fast as they could and the big young cuckoo screeching all the time for more.

Food

The general food is insects and their larvae, which it seeks in thickly branched trees and shrubs, but I believe that it will eat the eggs out of any kind of nest it finds. Others claim that it takes nestlings (Buller 1888; Turbott 1967) and even adult birds (Wilkinson 1952). Wilkinson noted it on Kapiti Island stalking and catching lizards on stony ground. There would be little opportunity for it to do this here.

Song

The main call is a long harsh screech, uttered by day and by night. This and all other calls are aptly described by A. T. Edgar (Falla, Sibson & Turbott 1966, 1970). At my old home in Moumoukai in the Hunua Ranges the only call heard was the harsh screech made

during migration. The calls from thick cover seem to come from one side and the other, so that it may ventriloquize to some extent, or perhaps merely turn its head as it calls. It sits parallel with a branch and looks part of it.

Besides some heard at Minginui at 2300 hours at the time of an earthquake on 4 October 1947, I also heard several calling for some time at night in bush near Wanganui after an earthquake. Buller (1888) mentioned an account by Captain Mair of seeing some hundreds, during three days of travel, in parties of 20 to 30, making a great noise while flying about in an area of dead trees and apparently feeding on cicada. HRMcK (pers. comm.) was told by a resident of Franz Josef village of many Long-tailed Cuckoo gathering in a large heavily foliaged native tree and chattering loudly. The observer was standing in the middle of the road and more were flying past on either side of him to the tree. Close questioning appeared to prove that they were really Long-tailed and not Shining Cuckoo. The nearest to these accounts that I have experienced has been 3 or 4 in different hawthorn trees screeching at the same time, a much lesser performance than that of the Shining Cuckoo.

Use of makutu

The makutu (a Maori term for spell of death) is certainly used by the Long-tailed Cuckoo. Guthrie-Smith (1914) told of one landing at a Tit's nest, appearing to touch but not harming the chicks physically and the watching parents skulking and not returning to the nest but leaving the chicks to die. HRMcK (pers. comm.) noted on Little Barrier Island (where the species is plentiful) several deserted passerine nests with one of the full clutch of eggs having a small dent in it. Perhaps the Cuckoo preferred to thus put the makutu on them, not feeling like eating them. These were not the nests of species in which it usually deposits its egg.

As the Long-tailed Cuckoo comes approximately a month later than the Shining, the September month is not included in the following analysis.

ANALYSIS OF MONTHLY CHARTS

(Brackets = total birds seen plus estimate of birds heard only).

Proportion seen to heard: 1 seen to 18 heard and not seen.

TIHOI

The total of Long-tailed Cuckoo seen for its two seasons, i.e., October 1944 to February 1946 was 64 (1216).

Count days per month for the 10 months of the two seasons averaged 24 days; days seen 4.20; days not seen 19.80.

Daily counts of birds seen ranged from 0 to 3.

Count days totalled 240 and the total birds seen 64, giving an average of 0.27 (5.13) per count day.

Notes on Analysis

The earliest dates for Long-tailed Cuckoo heard at Tihoi were 12 October 1944 and 16 October 1945.

No note was made of the last heard in February 1945.

In 1946 the last seen and heard was on 22 February.

Not included in this analysis is an " out of season " record of two seen and heard on 9 March 1946. Since these very late birds were vocal they may have been adults.

MINGINUI

The total of birds seen at Minginui for its 15 seasons, i.e., from the late spring of 1946 to the late summer of 1961, was 594 (11,286).

Count days per month for the 75 months of the 15 seasons averaged 23.53; days seen 4.96; days not seen 18.57.

Daily counts of birds seen ranged from 0 to 5, but usually 0 to 2 or 3.

Count days totalled 1765 and the total birds seen 594, giving an average of 0.34 (6.46) per count day.

Notes on Analysis

TABLE 4 — Monthly average of birds seen per count day during the 15 seasons, October 1946 to February 1961.

Oct.	Nov.	Dec.	Jan.	Feb.
0.02	0.44	0.75 (1.00)	0.27 (0.32)	0.03

The December and January counts need to be modified, as shown in brackets. As in the case of Tihoi, they had incomplete records owing to my being away for the Christmas holidays for an average of 10 days in December and 6 in January, so that the December counts should be at least one-third more, i.e., 0.25, making the total 1.00, and January one-fifth more, i.e., 0.05, making the total 0.32.

September was not included in Table 4. It had only 1 " out of season " record, 1 heard on 18 September 1953. The nearest early record to this for Minginui was of one heard flying south at night on 7 October 1956. Minginui had no " out of season " record.

TABLE 5 — Seasonal averages of birds seen per count day at Minginui

1946-47	0.11	1954-55	0.26
1947-48	0.16	1955-56	0.46
1948-49	0.26	1956-57	0.43
1949-50	0.22	1957-58	0.35
1950-51	0.44	1958-59	0.57
1951-52	0.33	1959-60	0.36
1952-53	0.05	1960-61	0.14
1953-54	0.06		

As with the Shining Cuckoo the 1946-47 season was very poor, then climbed gradually to a peak in 1950-51. The numbers of the Long-tailed Cuckoo were normal throughout the 1951 season but showed a marked drop in 1952-54, few returning to this country. However, there was a build-up in 1954-55 and 1955-56 showed a full recovery. Some other insectivorous birds already treated in this series followed much the same course, dropping in the whole of 1952 and on to part 1954, an exception being the Shining Cuckoo, which dropped much less in comparison in its 1952-53 and 1953-54 seasons. No explanation is evident.

The 1960-61 season shows a drop similar to that of the Shining Cuckoo:

Oct. 0 in 24 count days
Nov. 2 in 28 count days
Dec. 13 in 18 count days
Jan. 2 in 26 count days
Feb. 0 in 26 count days.

Since the New Zealand resident insectivores showed no decline in the 1960-61 season, yet both cuckoos did so, this could perhaps suggest that they imported some personal avian disease which carried them off early in their stay here.

WAIAU

The total of birds seen for Waiau for parts of the 9 months in the period 1946 to 1961 was 182 (3508).

Count days per month for the 9 months in which trips to Waiau were made averaged 5.70; days seen 4.60; days not seen 1.10.

Daily counts of birds seen ranged from 0 to 10.

Count days totalled 51 and the total birds seen 182, giving an average of 3.57 (67.83) per count day.

Notes on Analysis

The analysis of monthly charts for the Long-tailed Cuckoo shows Tihoi 0.27, Minginui 0.34 and Waiau 3.57 per count day. The much higher count for Waiau could be due to (a) my being on the move so much more while hunting; (b) there being more Whiteheads whose nests are used for breeding; (c) preference for beech forest for some reason which is not evident. (a) and (b) I do not think could account for the whole of the differences in the populations of the three areas.

SEASONAL RECORDING

September and March, the " out of season " months, were not included in the analysis. The only September arrival record was of one flying at night on the 18th in 1953. The next heard was on 18 November. March had two records, 2 birds at Tihoi on 9 March 1946 and one at Waiau of 3 birds on 3 March 1956.

Strangely enough, the Long-tailed Cuckoo was later in leaving Waiau than Minginui in the several years in which I happened to visit the back country at or near the end of the season. For instance, the last seen at Minginui in 1957 was on 30 January, but on a hunting trip to Waiau the same year I got 5 to 8 for 10-19 February and these were unlikely to have been the last. Again in 1958 Minginui had as its last date 18 January, while on another trip to Waiau the same year I got daily counts of from 2 to 8 from 10-19 February, and these again were unlikely to have been the last. I am at a loss to account for the difference in the leaving dates for the two areas which are so close together.

TABLE 6 — Arrival and departure dates of the Long-tailed Cuckoo.

First seen or heard			*Last seen or heard*		
1944	Oct. 12	1	1945	Feb.	Heard, no date
1945	Oct. 10	1	1946	Mar. 9	3
1946	Nov. 2	1	1947	Feb. 22	1
1947	Oct. 24	1	1948	Feb. 4	1
1948	Nov. 28	1	1949	Feb. 6	4
1949	Oct. 23	1	1950	Jan. 27	2
1950	Oct. 26	1	1951	Feb. 25	1
1951	Oct. 20	1	1952	Jan. 26	1
1952	Nov. 10	1	1953	Jan. 16	2
1953	Sept. 18	1	1954	Feb. 10	1
1954	Nov. 1	1	1955	Jan. 14	1
1955	Oct. 23	1	1956	Mar. 3	2
1956	Oct. 7	1	1957	Feb. 19	5
1957	Nov. 2	1	1958	Feb. 19	2
1958	Nov. 11	1	1959	Jan. 25	1
1959	Oct. 31	2	1960	Feb. 20	1
1960	Nov. 20	1	1961	Jan. 30	2

As with the Shining Cuckoo the uncharted " out of season " early and late records are included in this table, which covers Tihoi, Minginui and Waiau together.

Unlike the Shining Cuckoo the Long-tailed did not show significant gaps before the last seen or heard each year.

I have noted that in some years the Long-tailed Cuckoo was first heard flying high to the beech forest but in other years it would come first to the flats and valleys and then spread to the higher country.

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