## NOTES ON THE SONG OF THE KOKAKO (Callaeas cinerea wilsoni)

By G. M. MANING

In order to discover whether there was any definite variation in songs and calls throughout the year special observations were made during the period 24/1/55 to 31/8/56. This was carried out in a small clearing in fairly thick bush surrounding the manganese mine fourteen miles east of Clevedon at an altitude of about 1,300 feet, on the right bank of the Mangatawhiri head-waters. The mine is surrounded by sharp steep ridges and deep gullies. This is a high rainfall locality. The bush could hardly be more mixed in regard to both the large and small trees but tawa would be the most plentiful species. Fortunately it is an Auckland City Council water catchment area and the undergrowth has greatly benefited from the exclusion of browsing animals.

Kokako are present about the mine all the time. Nearly all of the calls were from a fairly sheltered steep slope to the immediate northwest, which gets the sun for the greater part of the day. At times songs could be heard far and near. In the first eight months, birds were sighted on twenty-three occasions. About half of the sightings were close, from ten to twenty feet; and were made when the birds were not singing. Every day for a fine week in September, 1955, a pair was seen at ten feet or less from the mine living-quarters in thick second growth of konini, mahoe and a tangle of vines. There was no result from a search for a nest then or later. Their flight is erratic and not graceful and at a distance this helps in identification, as does their practice of making long hops between branches when seen near at hand. On one occasion when a Tui was observed apparently trying to imitate the singing of a Kokako on a nearby tree the Kokako soon gave up the contest. They have become indifferent to the noise of heavy blasting and working machinery.

The song and calls can be only roughly described:

- (1) Full song; two long rich organ notes followed closely by three short-clipped whistled "pips" or "pipes," audible up to about one mile. The two organ notes are quite often given alone and the "pips" more rarely so.
- (2) Mewing call; a low musical call which can be heard at a few chains only and apparently used for keeping in touch.
- (3) Double call; a fairly short bell-like note immediately followed by a short abrupt note, like a sharp "kik" or "ick." This is not uncommon and seems to be used as a call to bring the mate from a distance. This feature has been observed by J. W. St. Paul.
- (4) Alarm or curiosity call; this sounds like "Pt-pt-pt" or "Took-took-took," audible only at close range.

- (5) The "cowbell" call; It has been frequently stated in the press by old bushmen further south that this bird gives a bell-like call similar to a cowbell. This was made the basis of their claim that it is the "true bellbird." This call has not been heard about the mine in the last fifteen years. J. W. St. Paul has heard it only up to about 1914 from 1905. He has lived in the area and been among the birds from then up to the present and states that the call was never common here. It seems that it has gone out of use locally.
- (6) Fragmentary calls; short pieces of the above calls are often used.

It was quite expected that the recorded period would reveal a change in the predominance of one or more of the calls at different parts of the year. The amount of song and call varied but the proportion of one to the other did not alter to any appreciable extent. The recordings at the mine showed that the full song was heard somewhat more frequently than calls. This ratio has not, I believe, been found elsewhere. The difference could be accounted for through calls being more frequent than song during the quiet part of the day, when the working of the mine precludes listening and through the quieter calls not being heard at other times owing to the steep gullies.

It seems strange that the record revealed considerable vocal activity from 24/1/55 to 30/9/55 but in the corresponding period 1/1/56 to 28/8/56 there was very little indeed. From 30/9/55 to 31/12/55 was also very quiet. From 28/8/56 up to January, 1960, the volume has never come anywhere near regaining the tempo of 1955, not even in springtime. This is not due to a decrease in the number of birds. At odd times over this latter period numerous songs have been heard, near and far, at the same time, proving that, though more quiet, Kokako are still present in the same strength. J. W. St. Paul also is quite sure that there are not fewer birds.

The Kokako is not one of the earliest songsters. The records show that in summer song starts from 6 to 7 a.m., after the sun is up and in winter from 7 to 8 a.m. None was recorded before full daylight. Little is heard after 9 a.m. Work in the mine prevents listening during the day but J. W. St. Paul, H. R. McKenzie and others agree that from about 9 a.m. to 4 or 5 p.m. is the most silent part of the day. Evening song is seldom of the volume of the morning. It is noteworthy that calls were loudest just before or just after rain, especially short heavy heat showers, irrespective of the time of day. Even this feature, however, is not constant. Warm, still weather is favourable, as against windy cloudy conditions.

## SUMMARY

Neither volume nor frequency of song has been found to be seasonal. The same applies to the calls.

The proportion of full song to the various calls does not appreciably alter at any time of the year.

The effect of the general run of the weather may be a factor but needs further study.