

South Island kokako search, Abut Head, South Westland

R Buckingham
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Mapua

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Abstract

This document describes a search for South Island kokako, carried out in September and November 1997, following a detailed report of presumed kokako seen recently by Barry Donovan at Abut Head, South Westland. Two sites where possible sightings were made were investigated intensively, while a more general search was carried out at other parts of Abut Head. Search methods involved broadcasting analogue and digital recorded kokako calls, and searching for potential kokako sign such as moss grubbing and feathers.

No convincing kokako sign was found, though a few possible kokako calls were heard during September, near one of the report locations. In September, a large area of fresh moss grubbing sign was found near forest edge, but this sign appeared to be associated with blackbird activity.

Short investigative surveys may be limited by the apparent wariness and unpredictable calling behaviour of South Island kokako. However, if kokako were present at Abut Head, more sign of them would have been expected during the time of year surveyed. Although the descriptions given in Barry Donovan's report suggest the possible presence of kokako at Abut Head, certain discrepancies in factual information need clarifying before further field investigations are recommended there.

1. Introduction

In July 1997 I received a comprehensive report from Barry Donovan (of Donovan Scientific Insect Research, Christchurch) describing observations indicative of South Island kokako (see Appendix for scientific names) near Abut Head in South Westland (Map 1). These observations, which were made during a period of 15-20 years, included five sightings of unidentified birds. On 24 October 1996 a "sky blue wattle" was clearly seen (with binoculars) on the side of the head of a bird presumed to be South Island kokako. Barry's most recent reported sighting of presumed kokako was made on 31 May 1997, at the same place where the blue-wattled bird was seen (Site 1, Map 2). After playing tape calls of juvenile North Island kokako at this site, an unidentified bird with a blue wattle flew within 3-4 m from him. Barry also reported seeing and hearing presumed kokako on another occasion, approximately one kilometre from the above site (Site 2, Map 2).

This document describes two investigations of Barry Donovan's kokako report; the first carried out in mid September 1997, and the other in late November 1997. No definite sign of kokako was found on either trip. Although some of Barry's observations of presumed South Island kokako seemed convincing, and correlated with previous evidence, there were inconsistencies in his descriptions that cast some doubt on the validity of the report.

2. Field staff and itinerary

FIRST SEARCH, SEPTEMBER 1997

Barry Donovan ferried John Kendrick, Ron Nilsson, and Rhys Buckingham by hovercraft to a private but near the mouth of the Whataroa River, in the late afternoon on 10 September 1997. That afternoon Barry showed us the location of one of the sightings near the hut (NZMG 22910 57845; site 2, Map 2). On 11 September we were shown the site of the blue-wattled bird sightings on a ridge site approximately a kilometre west of Donovan's but (NZMG 22900 57845; site 1, Map 2). On 12 September we began playing recorded kokako calls at the report localities and other appropriate habitat areas at Abut Head. Although the team left the area by hovercraft on 14 September, Rhys returned to the hut from Saltwater SF logging road, via the north bank of the Whataroa River on 15 September, to continue the investigation until 16 September 1997.

SECOND SEARCH, NOVEMBER 1997

Ian Flux, Rhys Buckingham, and Tim Cotter were transported by Barry Donovan to his hut at Abut Head during the early afternoon of 24 November 1997. A concentrated search was made at the two report locations from then until the end of the trip (28 November 1997). In addition, a tape playback transect survey was carried out between the hut and Saltwater Lagoon, via a forest survey transect line (see Map 2).

3. Objectives

- To evaluate the validity of the reports of kokako at Abut Head.
- To attempt to confirm the presence of kokako if thought to be present.

4. Locality description

Abut Head is a predominantly forest-covered, hilly peninsula, situated between Saltwater Lagoon to the north, and the Whataroa River to the south, in South Westland (Map 1). The river flats have been extensively modified, by farming and forestry. The hill country forest consists of scattered emergent podocarps (mainly rimu and miro), a kamahi-dominated canopy, and a dense understorey of kiekie, broadleaved shrubs, supplejack, and tree ferns. Occasional, relatively small areas of dense podocarps are found. Dense stands of kahikatea are present on swampy flats between the river flats and the hill country.

5. Methods

Notes were taken from conversations with Barry Donovan concerning his evidence of kokako at Abut Head. Information was also obtained from his written descriptions, both in a draft report, and his detailed hut log.

Listening for kokako calls was carried out between early morning and late afternoon, at appropriate vantage points close to the report localities. Both digital and analogue recorded calls of juvenile North Island kokako and presumed South Island kokako were broadcast, in an attempt to lure kokako so they could be seen or photographed. Tape recordings of kokako calls were not played during the first day of the first trip, in order to become familiar with unsolicited songbird vocalisations.

Tape recordings used included juvenile North Island kokako song (R. Buckingham, Pureora, 1987; DoC, Mapara SF, 1997), North Island kokako alarm (DoC, Mapara SF, 1997), 'bongs' (J. Kendrick & R. Buckingham, Caples Valley, 1983), and 'hollow' notes (R. Buckingham, Rocky River, Kahurangi National Park 1985). These calls were played back at approximately five minute intervals through two speakers set approximately 40 m apart. A switchboard enabled control of sound from either speaker (usually single notes or short sequences of calls were played through the two speakers alternately). One observer operated the playback tape recorder and switchboard, while the other observers operated the recording equipment set near the speakers. All observers hid in the undergrowth throughout the playback operation (1-2 hours at each site). A kokako model loaned by DoC Hokitika, and food lures (bananas, oranges) were placed near each speaker. Playback as described above was carried out on 12-13 September, and 25 November 1997, at two sites near which kokako had been reported.

More portable playback equipment (DCC 170™ digital recorder, Sanyo M 1002™ analogue tape recorder, Toa™ 10 W horn speaker, Sony portable minidisc, amplified, speaker unit) was used for playback at several sites in dense forest along forest survey transects, cut south-north across Abut Head (Map 2). Tape playback at these sites involved playing short sequences of calls (described above), approximately every five minutes, for a maximum of 30 minutes.

Digital tape recording equipment was used to attempt to record any calls presumed to be made by South Island kokako. This equipment included two Philips DCC 170™ compact recorders, a portable Sony DAT™ recorder, directional microphones, and two Philips SBC 3052™ microphones, each seated in a 50 cm diameter parabolic dish.

A search for moss grubbing sign and feathers was also carried out.

6. Results

6.1 BARRY DONOVAN'S REPORT

Since about 15-20 years ago, at two locations at Abut Head, near the mouth of the Whataroa River, occasional sightings of a dark-coloured bird with blue wattles on the side of the head, were reported by Barry Donovan (Map 2). The most recent sighting was in May 1997. In addition to the sightings, Barry reported hearing unusual calls and loud wing flapping.

The most convincing sightings were reported on 24 October 1996, 7 March 1997, and 31 May 1997 at one of these locations (NZMG 22900 57845; Map 2, site 1). On the first occasion a bird heard "noisily fossicking through scrubby undergrowth" appeared briefly, though only its head was visible in the foliage. Through binoculars, a "sky blue wattle" was observed on the side of the bird's head. On the second occasion, a dark bird, larger than a tui, with proportionally long legs was seen on small branches of a shrub close to the ground. When disturbed, the bird sprang backwards about 300 m at an angle of approximately 45°, landing on a branch, then "scrabbling away . . . through low growth". While in view, the bird made loud "clucking noises" similar to calls of a domestic hen (see below). The most recent sighting (May 1997) was perhaps more significant, as the bird was seen soon after playing calls of North Island kokako ('bongs'). A blue wattle was glimpsed as the unidentified bird flew past about 3-4 m from Barry.

Barry described three calls thought to be possibly made by kokako, heard at this site:

- (1) "mournful double notes" heard on two occasions;
- (2) "loud musical note" heard on one occasion;
- (3) "clucking" like a domestic hen.

Barry's imitation of the third call was of particular interest, as it sounded very similar to a tape recording of a presumed South Island kokako call recorded on Stewart Island in 1984. However, the call also resembles that of blackbird alarm (blackbirds are present throughout forest and other habitats at Abut Head).

At another location (NZMG 22910 57845; Map 2, site 2), closer to the hut, at the forest edge, Barry reported hearing loud "crunchy" wing flapping, and seeing an unidentified "blackish bird" fly after playing kokako tape recordings on 2 June 1997.

6.2 RESULTS OF INVESTIGATION

Kokako were not confirmed present during this investigation. On a few occasions, kokako-like calls were heard, but these were unidentified single notes,

estimated to be from a distance of >100 m (except one much closer call heard near a moss grubbing site, described below). The only observed response to tape playback was on 12 September 1997 (1420 hrs), when distant `bong' notes were heard. However, the source of these response calls was not determined.

An area of intensive moss grubbing was found on 12 September 1997 near the forest edge about 400 m west of Donovan's Hut. Much of the search effort was focused at this site, especially after a single kokako-like `hollow' note was heard near the area, at dawn on 13 September 1997. However, detailed observations indicated that blackbirds may have produced the grubbing sign, or at least had been attracted to the freshly disturbed moss. Blackbirds were commonly seen and heard in the vicinity, and their presumed droppings were common at the site. No feathers were found. The kokako-like call referred to above was heard only once, and may have been made by a tui.

No sign of kokako, or response by possible kokako to tape playback was observed during November.

6.3 HABITAT AND BIRD ASSEMBLAGE

The forest at Abut Head is floristically diverse, and structurally dense; presumably ideal habitat for South Island kokako. Presumed food species such as supplejack, horopito, broadleaved shrubs, and coprosmas are very common in this area. Indigenous bird numbers were relatively high, though some species (e.g. kaka, parakeet, weka, rifleman) were not encountered. Robins, which are isolated and rare in South Westland, were present in low numbers, predominantly near forest edges. New Zealand pigeon, tui, and bellbird were frequently encountered, and one sighting of kea was made in podocarp/broadleaved forest (NZMG 22900 57845; Map 2, site 1). Of the smaller insectivorous species, grey warbler, brown creeper, silvereye, fantail, and yellow-breasted tit were particularly common. Both shining cuckoo and long-tailed cuckoo (the latter uncommon, and only heard at night) were heard in November. A New Zealand falcon was seen near the but on 24 November 1997 (NZMG 22911 57842).

7. Discussion

Some of Barry Donovan's observations suggest that kokako may be present at Abut Head. His strongest evidence was repeated sightings of a blue-wattled bird at a single location where unusual calls were heard. The habitat in that area (as in other forested areas on the peninsula) was considered ideal for kokako, because of the diversity of plant food species present, and the structurally dense forest understoreys.

Many aspects of Barry's observations correlate with observations made by other observers (e.g. Buckingham 1996, Peter Child, pers. comm., May 1983, John Kendrick, pers. comm., December 1984, Ron Nilsson, pers. comm., De-

cember 1985). Indicators of possible kokako presence seem to relate to infrequent vocalisations at specific sites, where very occasional sightings of wary, kokako-like birds are obtained. Evidence of kokako presence becomes more convincing when kokako-like calls are heard after playing back North Island kokako calls. Such vocalisations (solicited or not), appear to be unpredictable, and can occur at any time of the year. The rarity of encounters, the few kokako-like calls heard overall, and the brevity of presumed kokako calls heard at any time, correlate with other observations (R. Buckingham, John Kendrick, unpublished material).

Some of Barry's descriptions and imitations of calls (and wing-flapping) were recognised as being similar to sounds presumed to have been made by kokako, heard or tape recorded in other South Island, or Stewart Island localities (R. Buckingham, John Kendrick, unpublished material). However, other descriptions (e.g. "clucking" and "wailing double notes") may apply to other species (e.g. blackbird and southern black-backed gull, respectively).

The blue wattle colour as described by Barry is surprising, as South Island kokako are generally regarded to have orange wattles. However, early descriptions of South Island kokako suggest that wattle colour was variable, and two documented reports describe blue-wattled South Island kokako (Douglas in Pascoe 1957; Stidolph 1971). It is possible that Barry glimpsed only the base of a wattle, which for South Island kokako is bright blue (Buller 1892). Orange-wattled North Island kokako have also been reported (Hamilton Junior Naturalists' Club 1975; Ian Flux, pers. comm. 1996).

Certain discrepancies were noted in some of Barry's descriptions (both written and verbal) which made overall facts difficult to interpret. For example, observations written in the hut log book (daily log) did not always correlate with observations presented in the final report, and no mention of sightings was made during a phone conversation between Barry and the author in April/early May 1997, after the supposed blue-wattled bird had been seen. However, this omission of important detail could have been made for personal reasons.

The moss grubbing sign found under dense kahikatea/broadleaved forest near the forest edge was unusual because the sign was localised, and very intensive over an area of about 300 m x 50 m. The apparent association of this sign with blackbird does not necessarily indicate that it was produced by them. Ground foragers such as blackbird, song thrush, and robin are likely to be attracted to moss or litter disturbances made by another species. However, the sign was not of the classic type described for presumed South Island kokako during studies on Stewart Island (Buckingham 1986).

The chances of encountering kokako on short duration trips are considered low, due to the presumed furtiveness of South Island kokako, and their unpredictable calling behaviour. Results of the investigation are thus inconclusive until further searching, at different times of the year, is carried out in this location. However, if kokako were present, more sign would have been expected during the time of year surveyed.

These initial surveys were important, as they allowed investigators to become familiar with the search locations, habitat, and details of Barry's observations.

8. Recommendations

- (1) Given the discrepancies found in reported observations, further investigations are required to evaluate the reliability of the report.
- (2) More substantial evidence (e.g. photographic, or observations by more than one observer) is required before conservation action be considered for South Island kokako.

9. Acknowledgements

I thank Ian Flux for his time and effort during this investigation. Acknowledgement is also given to voluntary helpers, John Kendrick, Ron Nilsson and Tim Cotter. John spent considerable time and expense in developing a sophisticated tape playback system specifically for following up South Island kokako reports. Communication and other assistance was kindly given by Department of Conservation (Hokitika and Franz Joseph).

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11. Appendices

11.1 SCIENTIFIC NAMES OF PLANTS AND BIRDS REFERRED TO IN THE TEXT

Plants (common names in alphabetical order)

horopito	<i>Pseudowintera colorata</i>
kahikatea	<i>Dacrycarpus dacrydioides</i>
kamahi	<i>Weinmannia racemosa</i>
kiekie	<i>Freycinetia baueriana banksii</i>
miro	<i>Prumnopitys ferruginea</i>
rimu	<i>Dacrydium cupressinum</i>
supplejack	<i>Rhipogonium scandens</i>
tree ferns	<i>Cyathea smithii, Dicksonia squarrosa</i>

Birds (in checklist order).

NZ falcon	<i>Falco novaeseelandiae</i>
weka	<i>Gallirallus australis</i>
NZ pigeon	<i>Hemiphaga novaeseelandiae</i>
kaka	<i>Nestor meridionalis</i>
kea	<i>Nestor notabilis</i>
parakeet	<i>Cyanoramphus auriceps</i>
shining cuckoo	<i>Chrysococcyx lucidus</i>
long-tailed cuckoo	<i>Eudynamys taitensis</i>
riflemen	<i>Acanthisitta chloris chloris</i>
brown creeper	<i>Finschia novaeseelandiae</i>
grey warbler	<i>Gerygone igata</i>
fantail	<i>Rhipidura fuliginosa fuliginosa</i>
yellow-breasted tit	<i>Petroica macrocephala macrocephala</i>
robin	<i>Petroica australis australis</i>
silveryeye	<i>Zosterops lateralis</i>
bellbird	<i>Anthornis melanura</i>
tui	<i>Prosthemadera novaeseelandiae</i>
South Island kokako	<i>Callaeas cinerea cinerea</i>
North Island kokako	<i>Callaeas cinerea wilsoni</i>

11.2 MAP 1. LOCATION OF SEARCH AREA

