

Hokonui 2 Bird Count
from DOC 21/5



Department of Conservation
Te Papa Atawhai

Internal Correspondence

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Subject Bird counts Hokonui II AHB programme

The following is a summary of bird counts in the Hokonui possum control programme in 2003 - 2004.

The Department has been assisting Hokonui runaka with a series of bird counts in the Hokonui Hills area in relation to the use of aerial 1080 to control possum for the Animal Health Board's TB Vector control programme.

Between July 2003 and May 2004 18 different 5 bird counts were carried out by DOC staff and iwi members in the Hokonui's. These counts make up the basis of the pre-possum control bird counts. The counts were standard 5 minute bird counts and were spread throughout the year.

These preliminary data should be treated with caution. The number of 5 minute bird counts required to produce scientifically robust results as to the effect of aerial 1080 on the birdlife of the Hokonui forest would be far greater than those covered by this project. What this investigation can demonstrate is whether or not bird species in the Hokonui area were affected at a population level. Bird counts were not carried out in a non-treatment control block so there is no reliable comparison between areas with bait and with no bait applied. This difficulty was caused by the lack of forested habitats of large enough size that were not subject to the 1080 coverage.

Preliminary results of pre-bait drop counts

17 different species of birds were recorded during the 18 counts, 7 introduced species and 10 native species. Of the native species only the more common of the bird species were recorded, this is a reflection of the rather poor condition of

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the birdlife of the Hokonui forests. Only two species listed as threatened were recorded during the counts, NZ pigeon and long-tailed cuckoo (both listed as "gradual decline") were present. Long-tailed cuckoo (a seasonal migrant) was only recorded once.

The most conspicuous native species was bellbird recorded on 16 of 18 counts. On the whole introduced species of finches (dunnock, redpoll and chaffinch) were more abundant than most of the native species. Some species were seasonally more abundant than at other times (e.g. silvereyes in winter).

Table 1. Summary of data for pre bait drop bird counts - Hokonui.

Species	Number of 5mbc recorded in. (out of 18)	Average number of times the species was noted in counts when recorded	Average number of times recorded across all counts
Bellbird	16 (89%)	3.1	2.78
Kereru	8 (44%)	1.9	0.83
Silvereye	10 (55%)	4	2.22
Grey warbler	11 (61%)	2	1.22
Fantail	4 (22%)	1.3	0.29
Tomtit	12 (67%)	2.5	1.67
Brown creeper	2 (11%)	1.5	0.17
Tui	6 (33%)	1.2	0.39
Paradise shelduck	1 (5%)	1	0.06
Long-tailed cuckoo	1 (5%)	1	0.06
Blackbird	10 (55%)	2.8	1.56
Thrush	4 (22%)	1	0.22
Magpie	7 (39%)	1.4	0.56
Redpoll	15 (83%)	2	1.67
Goldfinch	1 (5%)	2	0.11
Chaffinch	12 (67%)	1.7	1.11
Dunnock	16 (89%)	2.7	2.39

Post Bait Drop Monitoring.

Only one set of 5 minute bird counts has been completed since the bait drop. This data clearly shows that all species that were recorded prior to the bait drop were recorded after the drop (except for long-tailed cuckoo [which would be in the islands of the Pacific at this time of year] and a vagrant record of a paradise shelduck).

All species were recorded at a broadly similar rate, no species showed an unexpected decline. Some species were also recorded outside the 5 minute bird counts (e.g. NZ pigeon). From this early preliminary result it is concluded that the

populations of bird species of Hokonui forest have survived the poisoning operation, as predicted.

The monitoring will continue periodically over the next 2 years so that a similar amount of data is collected post the bait drop.