# DISTRIBUTION OF BIRDS IN THE SOUTH-EAST KAWEKA RANGE

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#### Introduction

An investigation of the birds inhabiting the Tutaekuri, Ngaruoro and Oamaru River Catchments of the Kaweka Range was carried out in the summer of 1959-60. Observations were made during a survey by the Forest and Range Experiment Station, N.Z. Forest Service, Napier, of watershed conditions in the Tutaekuri and part of the Ngaruroro catchments. As time did not permit complete coverage of the Ngaruroro and the Oamaru, records from these areas will be used only for comparison with the completed Tutaekuri catchment.

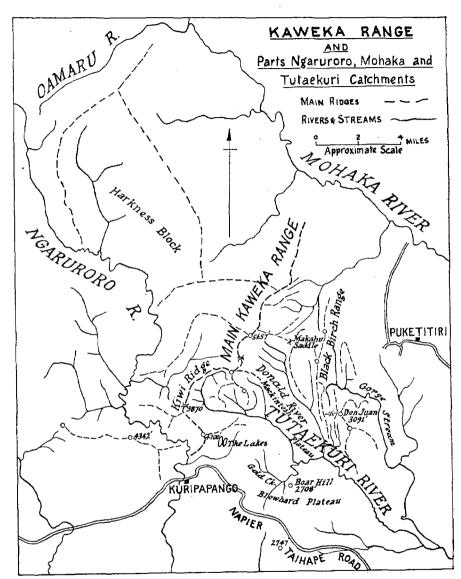
Fifty-three days (between 14/11/59 and 28/1/60) were spent in the Tutaekuri catchment during which time all main ridges and streams were traveresed. In addition, 21 days were spent in the Ngaruroro and Oamaru River areas, comprising two days in November, 1959, three days in January, 1960, and 16 days in February, 1960.

The area covered in the Tutaekuri, some 60 square miles, extends from the head waters of the Tutaekuri and its main tributary, the Donald River, to the south edge of the Blowhard Plateau (along which runs the Napier-Taihape Road), and east to near Puketitiri. The altitudinal range of the area is from 1,000 feet in the lower Tutaekuri to 5,657 feet on the Main Kaweka Range.

Throughout the survey, daily records of sightings and calls were made and other evidence of bird life noted. Little has been published in "Notornis" on the birds of the Kaweka Range, but a note of interest is a report by D. A. Bathgate ("Notornis" VI, 1955) of Kakapo in the head of the Ngaruroro in 1900.

The Area

The Kaweka Range, part of the main North Island mountain axis, includes the highest land in Hawkes Bay, rising to 5,657 feet at Kaweka Trig, and covering an area of approximately 400 square miles. The Tutaekuri River drains the south-east corner of the Range and flows eastward to Napier, a distance of about 40 miles. The Tutaekuri catchment includes two large plateaux, the Mackintosh and Blowhard, rising up to the Main Range in the west, and having foothill ranges up to 3,594 feet flanking them on the east. Farm land borders the eastern slopes of these foothill ranges. A scrub consisting mainly of manuka (Leptospermum scoparium) and Dracophyllum subulatum from 3 feet 8 feet high covers most of the plateaux, with occasional small pockets of podocarps on the valley sides and on the Blowhard. Red and mountain beech (Nothofagus spp.) forest occurs on the lower slopes of the Main Range, in the head waters of the Tutaekuri and Donald Rivers and in islands on both plateaux. Manuka and kanuka (Leptospermum ericoides) scrub covers much of the eastern foothills. Fuchsia, Houheria, Nothopanax spp. and other hardwoods are common near streams and rivers, while tussock grasses (Poa and Danthonia spp.) and sub-alpine vegetation predominate on the open tops.



The Tutaekuri Birds

Thirty-eight species were recorded in the Tutaekuri catchment. No attempt has been made to discuss relative abundance apart from brief comments about each species. However, in general, the following five birds were found to be the most numerous:

— Pied Tit, Greywarbler, Blackbird, Bellbird and Chaffinch. The complete list of species encountered is presented below:

NORTH ISLAND KIWI: Although no sightings were made of kiwis, evidence points to their presence in the Tutaekuri head waters at least. An egg shell, and later a dead adult kiwi, were found in the upper Tutaekuri north of Kiwi Saddle. The egg (found on 14th November) and kiwi (which had been dead about 10 days) were photographed. Included in the stomach contents of the carcase was a large male weta (Hemideina megacephala), and two native land snails (Wainuia sp., species uncertain) about one inch in diameter. Feathers were found by two survey members above the bush-line at 4,500 feet in the absolute head of the Tutaekuri. No recordings were made in the Donald catchment.

BLACK SHAG: Seen in open and gorge regions of the lower and middle Donald and Tutaekuri Rivers. Only a few birds were observed.

PARADISE DUCK: Recorded in the lower Donald River, in the Donald-Tutaekuri confluence area, and in the lower Tutaekuri near farm land. Both Paradise and Grey Ducks were found in small numbers: about four of each being seen.

GREY DUCK: Grey Ducks were found only in the middle and lower Tutaekuri and on the east side of the Blowhard Plateau. In 1956 Grey Ducks were recorded in the upper Tutaekuri by the writer.

HARRIER: Harriers occurred fairly evenly over the area and were twice as numerous as falcons, notably in the open tops, where a third of the recordings were made.

N.Z. FALCON: Most recordings were on the east side of the catchment in the Blowhard and Black Birch Range areas. Falcons were seen in valley bottoms, over all types of vegetation, and once on the open tops below Kaweka Peak at about 5,000 feet.

PHEASANT: Pheasants were found east of a line through north Gorge Stream to Gold Stream. They were not as abundant as quail and were found in scrub or grass up to 2,000 feet, mostly on old farm land which has reverted to scrub.

CALIFORNIAN QUAIL: Recorded in the south and east parts of the catchment, i.e. on the Blowhard Plateau, lower Tutaekuri River and east of Gorge Stream in open, short scrub. Quail were seen on the south end of Kiwi Ridge at 4,100 feet in scattered, short manuka and grass. A number were recorded on the Blowhard Plateau but they do not seem to have penetrated far into the Range and were not recorded on the Mackintosh Plateau.

BLACK-BACKED GULL: Seen in flight over Don Juan (\$,091ft.), and the south Blowhard Plateau. From these and other records in the Ngaruroro it seems that this gull occurs sporadically over the southern Kawekas, and individual birds are likely to be recorded alomst anywhere in the area.

PIGEON: Not present in large numbers, but does occur widely through the area. Half of the recordings were in the Donald catchment and the remainder were in the Tutaekuri head and east of Gold Stream. Pigeons were seen in the air at 5,500 feet below Kaweka Peak, and several times over 3,800 feet.

KAKA: Limited to the upper Tutaekuri beneath Kiwi Ridge and the head of the Donald. Recordings were made between 3,900

feet on Kiwi Ridge and 3,200 feet in the Donald head at Makahu Saddle. There is also a possibility that this bird is present in the Donald River gorge north-east of the Mackintosh Plateau.

YELLOW-CROWNED PARAKEET: Found only in the Tutae-kuri head beneath Kiwi Ridge (where it is fairly common), and in the Donald head near, and on Makahu Saddle. In addition, unidentified parakeets were seen in the air over the Black Birch Range and north Kiwi Ridge. Observations were made between 3,000 feet and 4,700 feet.

SHINING CUCKOO: Evenly distributed throughout the area except for the west Blowhard and Mackintosh Plateaux where recordings are scattered. Common in occurrence in most other areas up to 4,300 feet, but not recorded in the open tops.

LONG-TAILED CUCKOO: Found throughout the head waters of the Tutaekuri up to 4,700 feet and scattered in the Donald catchment. Recordings in the Donald were at its head near Makahu Saddle. lower down west of Don Juan, and at the Donald-Tutaekuri confluence. Nearly half of the recordings of this bird were in the upper Tutaekuri.

MOREPORK: Recorded throughout the area in beech forest up to 3,870 feet. Moreporks were present down to the Donald-Tutaekuri confluence, but were not recorded on the Blowhard or Mackintosh Plateaux apart from the Mackintosh Bush.

KINGFISHER: A number were recorded in the lower Donald and in the Tutaekuri below the Donald-Tutaekuri confluence, but none were seen in the head waters.

RIFLEMAN: Over half of the recordings are from the upper Tutaekuri and a quarter from the head of the Donald. The remainder are scattered on the Mackintosh and east Blowhard Plateaux. Most stands of beech had Riflemen but they were not recorded in scrub much above 4,000 feet or on open tops.

SKYLARK: Nearly half of the recordings were on, or near the Main Range and Kiwi Ridge. The remainder were along the Black Birch Range and east Blowhard Plateau. Not as abundant as pipits and more restricted to high open ground over 2,000 feet.

PIED FANTAIL: Distribution is scattered over most of the area. Found up to approximately 4,300 feet on the Main Range in beech but not on open tops. Most recordings are from the Tutaekuri head, the Donald-Tutaekuri confluence area and the south Black Birch Range area. Fantails were also recorded on the Mackintosh Plateau.

PIED TIT: Common, and evenly distributed over the catchment in tall scrub and beech areas up to 4,400 feet. Not seen on the open tops.

NORTH ISLAND ROBIN: Found only in the upper Tutaekuri at approximately 3,000 feet below Kiwi Saddle and just west of Don Juan at 2,400 feet.

FERNBIRD: Found on several occasions on the south and east borders of the Blowhard Plateau in short manuka, toi-toi (Arundo conspicua) and Dracophyllum subulatum. This bird was also recorded in Puketitiri and there is a strong possibility that it is present on the western side of the Mackintosh Plateau.

WHITEHEAD: Frequent occurrence in the Tutaekuri head and upper Donald catchment. Also scattered recordings on the Mackintosh and Blowhard Plateaux. Seen mainly on upper valley slopes up to 4,600 feet in bush, but not on the open tops, or often near valley bottoms.

GREYWARBLER: Distributed abundantly over the entire area up to 4,600 feet in scrub and bush. Not found in grass areas or open tops. In one scrub area in the lower Donald where Warblers were especially abundant, there was a high population of small grey moths averaging about 12 to every 25 square vards.

SONG THRUSH: All recordings were east of a line from the Donald head to Gold Stream. Most of the observations were on the east Blowhard Plateau and the rest were at the Donald head.

BLACKBIRD: Found commonly throughout the catchment at all altitudes up to 4,000 feet. Apart from being seen in beech forest and scrub, Blackbirds were recorded on river flats and occasionally in low sub-alpine vegetation on the tops. Blackbirds were recorded six times as frequently as Thrushes.

HEDGESPARROW: Nearly three quarters of the recordings were east of a line from the Donald head to Gold Stream. Hedgesparrows were moderately abundant in the eastern Donald catchment and east Blowhard Plateau. Scattered occurrences in the Tutaekuri head up to 4,600 feet and on the Mackintosh Plateau. No recordings were made on the open tops.

PIPIT: The most common bird in the tops but also found widely in the area on river flats and in open scrub regions. Records were made between 1,000 feet and 5,600 feet. Pipits were not recorded east of the Black Birch Ridge (except in the lower Tutaekuri), but they are probably present on the Don Juan massif.

BELLBIRD: Quite common and almost ubiquitous, but none were recorded above 4,600 feet on the open tops.

TUI: Found mainly around the head waters of the Tutaekuri but also present in bush on the Mackintosh Plateau and around the heads of the Donald River and Gorge Stream. Tuis were not found in the eastern half of the area and generally were not common. The highest recording was at about 4,000 feet on Kiwi Ridge.

WAXEYE: Present throughout the catchment. Not very common on the south Mackintosh and west Blowhard Plateaux but were abundant elsewhere. Three were seen at 4,590 feet in sub-alpine vegetation.

GREENFINCH: Present in manuka scrub in the Tutaekuri northeast of the Lakes and on the central Blowhard Plateau. The Greenfinch is not common and is limited to the southern part of the area.

REDPOLL: Present on the open tops and in scrub areas. Half of the recordings are from the Blowhard and Mackintosh Plateaux and the rest are scattered along Kiwi Ridge, the Main Range and high ground in the east Donald catchment. Redpolls and Skylarks were the most common birds on the tops after the pipit.

CHAFFINCH: One of the most common birds in the catchment. and were found everywhere (except on the open tops and above 4,600 feet) in grass, scrub and beech. Occasional birds were recorded just above the bush-line.

YELLOWHAMMER: All recordings (except one on the Mackintosh Plateau) were in the lower Tutaekuri and north Gorge Stream, and were below 2,800 feet. Not common and was absent further in the Range.

CIRL BUNTING: Recorded once, west of Gold Stream on the north edge of the Blowhard Plateau in open scrub.

STARLING: A few were seen in the lower Tutaekuri and on the south Blowhard Plateau. They do not extend far into the Range.

AUSTRALIAN MAGPIE: Present mainly on the Blowhard Plateau and the lower Tutaekuri near farm land. No recordings in this catchment were made north of the Blowhard Plateau, and most were seen in grassy areas.

### Comparison with Adjacent Areas

Three major areas are to be briefly compared with the Tutaekuri catchment. They are \_\_\_

- 1. The middle Ngaruroro River, i.e. the portion west of the Tutaekuri,
- 2. The upper Ngaruroro, and
- 3. The Oamaru River.

As previously stated 38 species were recorded in the Tutaekuri. In the Ngaruroro, 33 were recorded, and in the Oamaru, 24. The time spent in each area is to some extent reflected in the number of species contacted. Although many observations were made around the Ngaruroro and Oamaru Rivers, only the main features arising from them are used here. Points of interest concerning species found in all the areas are dealt with below, but striking differences have been placed in table form for ease of interpretation. The 21 species not listed in the table were recorded in all four regions. They were:

Black Shag	Morepork	Blackbird
Harrier Hawk	Rifleman	Pipit
Falcon	Skylark	Bellbird
Kaka	Fantail	Waxeye
Yellow-crowned parakeet	Robin	Redpoll
Shining Cuckoo (?) *	Whitehead	Chaffinch
Longtailed Cuckoo (?) *	Greywarbler	Magpie

Shining and Longtailed Cuckoos were not recorded in the upper Ngaruroro and Oamaru Rivers but this was due, almost certainly, to the time of the year.

# TABLE OF SPECIES NOT COMMON TO THE COMPARED AREAS

Species	Tutaekuri	Middle Ngaruroro	Upper Ngaruroro	Oamaru
N.I. Kiwi	 *			*
Paradise Duck	 *		*	*
Grey Duck	 *	*		*
Pheasant	 *			
Californian Quail	 *	*		*
Banded Dotterel			*	
Black-backed Gull	 *	*		
Pigeon	 *	*		
Kingfisher	 *			

Species		Tutaekuri	Middle Ngaruroro	Ngaruroro Upper	Oamaru
Fernbird	 _	*			
Song Thrush	 	*	*		
Hedgesparrow	 	#	45		
Tui	 	*			
Greenfinch	 	*	*		
Goldfinch	 		*		
Yellowhammer		*	*		*
Cirl Bunting	 	*			
Starling	 	*			

(Asterisks indicate presence)

To complete the list of known species, mention should be made of a pair of Blue Ducks which were observed in the middle Ngaruroro in October, 1959, by A. Cunningham, N.Z.F.S., (pers. comm.), and in the same area, since then, by Government track cutters (pers. comm.). Also of a bird answering to the description of the Bluewattled Crow reported (pers. comm.) by shepherds in the Harkness region of the upper Ngaruroro.

One similarity between the regions is that no Red-fronted parakeets were recorded. All those identified were Yellow-crowned, which were common at the Oamaru head. Robins were also common in the upper Oamaru, more so than in the Tutaekuri head. Riflemen and Tomtits were fairly numerous in the Ngaruroro and Tutaekuri, but scarce in the Oamaru. Few Pigeons were found in the Ngaruroro, whereas they were widely distributed in the Tutaekuri. Pipits were twice as numerous as Skylarks in the Tutaekuri, but in the middle Ngaruroro these two birds were almost equal in number.

## Summary of Tutaekuri Catchment

From the species distribution outlined, a small group emerges, comprising Pheasant, Californian Quail, Greenfinch, Goldfinch, Yellow-hammer, Starling and Magpie, which seems to be mainly confined to the southern and eastern sectors of the Tutaekuri catchment, i.e. the group is absent from the upper reaches of the Donald and Tutaekuri Rivers. As previously mentioned, the south and east borders are areas largely scrub covered, and are bordered by farmland. There is a general absence of wading birds in the Tutaekuri for although there are two small lakes at the southern end of the Range they lie in the Ngaruroro catchment. However, Pied Stilts were seen near the Napier-Taihape road about 20 miles from the Lakes towards Napier in an area which lies between the lower Ngaruroro and Tutaekuri Rivers. Of the 38 species encountered in the catchment, 24 were present in the head of the Tutaekuri itself, and 23 in the Donald head.

### Acknowledgments

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### REFERENCE

Elder, N. L. (1959) — "Vegetation of the Kaweka Range," New Zealand Forest Service Technical Paper No. 27.