

THE MAGPIE INVESTIGATION.

As stated in the last number, it has been decided to undertake a special study of the Australian Magpies (*Gymnorhina hypoleuca* and *G. tibicen*.) in New Zealand. Members are urged to reply as fully as possible to the questionnaire, and also to send in any further information subsequently obtained. Please send all information to L. W. McCaskill, Teachers' Training College, Christchurch, C.1.

1. Are magpies found in your district? If so, what kind—White Backed or Black Backed, or both?
2. Can you give an estimate of the number of birds in any stated area, e.g., river, valley, township, farm, etc.?
3. Do you consider the numbers are increasing, decreasing, or stationary?
4. What is the usual habitat of the birds, e.g., bush edge, pine plantation, park, school ground, etc.?
5. Have you any information as to when the birds arrived or were introduced?
6. What do you know of the nesting habits, e.g., date, number of broods, site, materials used, number of eggs, number of young reared?
7. Have you any information as to the feeding habits?
8. Do you consider that magpies have any harmful effects on other birds in your districts?
9. Have you any records of attacks by magpies on human beings?
10. Have you any other information not specifically asked for?

Write now before you forget, and answer as many of these questions as possible. If you know nothing of magpies, write stating the district in which they do not occur. We hope to get at least a post-card from **every member now**, and more information later. If you take a train journey, look out of the window on one side and count the magpies, noting the numbers between various stations. Record the date, time and weather. A number of transects like this would give valuable data on distribution. If you are interested in this method, which could be used for other species, and would like more information, don't hesitate to write and ask for it.

ONE YEAR OF BIRD OBSERVATIONS AT WAIKANAE RIVER ESTUARY.

By A. A. Kirk and K. A. Wodzicki.

The Waikanae estuary has for a long time been an attractive spot for Wellington ornithologists for several reasons. Situated about 30 miles to the north of Wellington, it is accessible even during war time in spite of travel restrictions. The Waikanae River, flowing down from the southern part of Tararua Range, is much smaller than the

Otaki or Manawatu, though it might be considered as one of the typical North Island rivers of the West Coast, with a well-developed shingle bed and a fairly long and spreading estuary. Owing to deforestation and consequent erosion, the lower reaches of the river are subjected to geomorphic changes, which have been very noticeable even in the short period of one year's regular visitations. In addition to the fact that the estuary itself provides a good food supply, the mouth of the river is opposite to the bird sanctuary of Kapiti Island, which undoubtedly has some influence on the population of birds in the estuary. The aim of this study was to gather further information on the biology of some New Zealand birds, and also to take into account some facts from the ecological point of view. If these observations can be carried out for a period of, say, two years, a better picture of New Zealand bird life on the West Coast of the North Island might be obtained.

The present investigation brings a few odd records from previous years made by C. A. Fleming (C. A. F.) and one of the present observers (A. A. K.). In the second part the records are more or less the results of regular visits made from the beginning of July, 1941, to June 30, 1942. These visits, each lasting several hours in order to check up the exact number of birds present at the estuary, were made either individually or sometimes together by A. A. K. and K. A. W. On some of our trips we were assisted by Dr. R. A. Falla (R.A.F.) or Mr. C. A. Fleming (C.A.F.) The enclosed tables give us the dates of the different trips. Unfortunately, owing to war conditions, it was not possible to visit the estuary in October and May. We hope to be able to present for the year 1942-43 a more detailed report, which will include at least one visit a month.

(A)—RECORDS AVAILABLE PREVIOUS TO JULY, 1941.

The observations carried out at the Waikanae estuary previous to July, 1941, were casual, but the numbers of birds observed were checked up and compared with those obtained in 1941-42. They might be of some use from the ecological point of view.

16th November, 1934 (A. A. K.)—"White-fronted Terns and Black-backed Gulls numerous. 300-400 Banded Dotterels, about 16 Godwits, and 20-30 Pied Stilts."

13th November, 1937 (A. A. K.)—"Numerous Terns, Shags, and Gulls. One pair of Black Oyster-Catchers with nest, having a clutch of 2 eggs. About 20 Godwits and 20-30 Pied Stilts with four nests, each containing a clutch of four eggs."

27th November, 1937 (A. A. K.)—"All nests of Pied Stilts and Black Oyster-Catchers washed away by recent floods and spring tides."

23rd January, 1939 (A. A. K. and C. A. F.)—"Black-backed and Red-billed Gulls in large numbers present. About 200-300 White-fronted Terns and one strange Tern thought by C. A. F. to be the Arctic Tern. The pair of Black Oyster-Catchers. Banded Dotterels in fair numbers. 20-30 Pied Stilts."

TABLE I.

FREQUENT VISITORS. (Including birds nesting on the estuary or in its proximity in 1941-1942.)

Dates of Visits.	15.7.41	9.8.41	21.9.41	23.11.41	20.12.41	4.1.42	1.2.42	22.2.42	22.3.42	18.4.42	1.6.42	14.6.42	Remarks.
1. Black Shag (<i>Phalacrocorax carbo</i>)	—	6†	13	0	8	13	—	26	30	1	5	1	
2. Paradise Duck (<i>Casarca variegata</i>)	0	0	0	0	0	0	0	0	1‡	0	2‡	6	‡ The single bird of 22.3.42 was associated with Black Backed and Red Billed Gulls, and pair of 1.6.42 with domestic goose. x The birds were in large flocks
3. Grey Duck (<i>Anas superciliosa</i>)	0	8	0	2	0	0	0	125x†	200x†	16	0	3	
4. Black-fronted Tern (<i>Chlidonias albigstrata</i>)	18†	1	0	0	0	0	1	1	12	7	180	15	
5. Caspian Tern (<i>Hydroprogne caspia</i>)	8†	11	17	4	2	0	0	23	15†	12	4	3	
6. White-fronted Tern (<i>Sterna striata</i>)	2	6†	0	100	36	1	150†	330	300†	300†	100	1	
7. Black-backed Gull (<i>Larus dominicanus</i>)	70-100	50	—	150	50	100	200†	34	200†	200-300	200	120†	
8. Red-billed Gull (<i>Larus scopulinus</i>)	2†	50	12	8	20	100†	200†	numerous	100†	20	43†	30	
9. Black-billed Gull (<i>Larus Bulleri</i>)	8†	4†	0	0	0	0	5	0	0	2	5†	1	
10. North Island Oyster Catcher* (<i>Haematopus Beicheki</i>)	4	4	2	2	1	1	1	0	0	0	0	0	
11. Banded Dottrel* (<i>Charadrius bicinctus</i>)	4†	28†	22†	16	18	30†	20	21	43	30†	35†	8	
12. Pied Stilt* (<i>Himantopus leucocephalus</i>)	9†	20	22	12	15	25	23†	44†	38	11	42	15†	
13. Pukeko* (<i>Porphyrio melanotus</i>)	—	—	—	—	4¶	—	—	—	—	—	—	—	¶ The Pukeko haunts are a little up the estuary itself, and were visited only once.
Observers	C.A.F. A.A.K.	C.A.F. A.A.K.	C.A.F. A.A.K. K.A.W.	C.A.F. A.A.K.	K.A.W.	K.A.W.	C.A.F. K.A.W.	K.A.W.	K.A.W.	R.A.F. A.A.K. K.A.W.	A.A.K. K.A.W.	K.A.W.	

Key to Abbreviations and signs used: — Record not taken. 0 Nil record. † Probably more birds than number recorded. ‡ Average number. * Birds regularly nesting close to estuary. C.A.F., C. A. Fleming. A.A.K., A. A. Kirk. R.A.F., Dr R. A. Falla. K.A.W., Dr K. A. Wodzicki.

TABLE II. OCCASIONAL VISITORS. (Excluding land birds.)

Dates of Visits.	Previous to July, 1941	5.7.41	9.8.41	21.9.41	23.11.41	20.12.41	4.1.42	1.2.42	22.2.42	22.3.42	18.4.42	1.6.42	14.6.42	Remarks.
1. Little Blue Penguin (<i>Eudyptula minor</i>)	—	—	—	—	—	—	—	1x	—	—	—	—	—	x In Channel between Kapiti Island and mainland.
2. Cape Pigeon (<i>Daption capense</i>)	—	—	—	—	1xx	—	—	—	—	—	—	—	—	xx Corpses on the beach.
3. Broad-Billed Prion (<i>Pachyptila vittata</i>)	—	1xx	—	—	—	—	—	—	—	—	—	—	—	xx Corpses on the beach.
4. Salvin's Prion (<i>Pachyptila salvini</i>)	—	1xx	—	—	—	—	—	—	—	—	—	—	—	xx Corpses on the beach.
5. Fairy Prion (<i>Pachyptila turtur</i>)	—	1xx	—	2xx	10xx	—	—	—	—	—	2xx	2xx	—	xx Corpses on the beach.
6. Sooty Shearwater (<i>Puffinus griseus</i>)	—	—	—	—	3xx	—	—	x several	—	—	—	—	—	xx Corpses on the beach.
7. Fluttering Shear- Water (<i>Puffinus gavia</i>)	—	—	—	—	—	—	—	5x	—	—	—	—	—	x Observed in channel x Observed in channel
8. Australian Gannet (<i>Moris serrator</i>)	—	—	—	—	—	—	—	x several	2	—	—	—	—	x Observed in channel
9. Shoveller (<i>Spatula rhynchotis</i>)	—	—	—	ii z	—	—	—	—	—	—	—	—	—	ii Three pairs. z On small lake close in the estuary.
10. Mallard (<i>Anas platyrhynchos</i>)	—	—	—	—	12xz	—	—	—	—	—	—	—	—	z On small lake close in the estuary.
11. Black Swan (<i>Chenopsis atrata</i>)	—	—	—	—	2z	1	—	—	—	—	—	—	—	z On small lake close in the estuary.
12. Fairy Tern (<i>Sterna nereis</i>)	1 (?) on 23.1.39	—	—	—	—	—	—	—	—	—	—	—	—	
13. Arctic Skua (<i>Stercorarius parasiticus</i>)	—	—	—	—	—	—	—	1x	—	2	—	—	—	
14. South Island Pied Oyster-Catcher (<i>Haematopus finschi</i>)	—	1	1	—	—	—	—	1	—	1	—	—	—	
15. Bar-Tailed Godwit (<i>Limosa lapponica</i>)	20 on 13.11.41	—	—	—	—	—	—	—	—	—	—	—	—	
16. Reef Heron (<i>Demigretta sacra</i>)	—	—	—	—	—	1	1	—	—	—	—	—	—	
Observers	C.A.F. A.A.K.	C.A.F. A.A.K.	C.A.F. A.A.K.	C.A.F. A.A.K.	C.A.F. A.A.K.	K.A.W.	K.A.W.	C.A.F. K.A.W.	K.A.W.	K.A.W.	R.A.F. A.A.K.	A.A.K. K.A.W.	K.A.W.	

(B)—THE FIRST YEAR OF REGULAR BIRD OBSERVATIONS AT
WAIKANAE ESTUARY, 5th JULY, 1941, to 14th JUNE, 1942.

The birds observed in this period are arranged in the following groups:—(1) Frequent visitors, including birds nesting at the estuary or in its proximity; (2) occasional visitors; and (3) land birds, excluding sea birds and waders.

1. Frequent Visitors.—The numbers of this group of birds observed, including the dates of observation and the name of the observers, are to be found in Table I.

This list includes 13 species of sea, waterbirds, and waders, frequent visitors or resident birds of Waikanae River estuary or its proximity. Four species only (*Haematopus reischeki*, *Charadrius bicinctus*, *Himantopus leucocephalus*, and *Porphyrio melanotus*) are more or less regularly breeding at the mouth of the river.

2. Occasional Visitors.—The number of birds observed in 1941-42, including the dates of observation, and some casual remarks are to be found in Table II.

The list includes 16 species of sea, waterbirds, or waders which were occasionally recorded at the estuary. These birds fall in two distinct groups: birds belonging to the estuary proper and birds living off the coast.

The first group consists of the following species: Shoveller (*Spatula rhynchotis*), Black Swan (*Chenopsis atrata*), Fairy Tern (*Sterna nereis*), the South Island Pied Oyster-Catcher (*Haematopus finschi*), the Bar-tailed Godwit (*Limosa lapponica*), and the Reef Heron (*Demigretta sacra*). The second group consists of oceanic birds, occasionally observed in the channel between Kapiti Island and the mainland or recorded as corpses on the beach after heavy gales. This subgroup is made up of the following species: Little Blue Penguin (*Eudyptula minor*), nesting on Kapiti Island, Cape Pigeon (*Daption capense*), three species of Prions (*Pachyptila vittata*, *P. salvini*, and *P. turtur*), two species of Shearwaters (*Puffinus griseus*), nesting on Kapiti Island, and (*P. gavia*), the Australian Gannet (*Morus serrator*), and the Arctic Skua (*Stercorarius parasiticus*).

One record, i.e., that of the Fairy Tern (*Sterna nereis*) is dubious for difficulties in observation and will await further confirmation.

3. Land Birds.—The land birds include the largest quota of introduced birds. These birds were observed casually on the estuary proper or in its vicinity, in a tussock-lupinus-manuka shrub country or close to some of the small natural ponds.

The following is a list of the species together with some casual observations:—

1. Native Pigeon (*Hemiphaga novaeseelandiae*).—20/12/41 single bird observed in flight from Kapiti Island to the mainland.
2. Harrier (*Circus approximans*).—On each visit 1-3 birds observed.

3. Kingfisher (*Halcyon sanctus*).—Frequently observed, both on the beach and also in the remnants of a manuka bush.
4. Pipit (*Anthus novaeseelandiae*).—Frequently observed in fair numbers on the beach and the banks of Waikanāe River.
5. Grey Warbler (*Pseudogerygone igata*).—Several pairs living in the lupinus-manuka shrubs.
6. Fantail (*Rhipidura flabellifera*).—A few birds in same shrubs observed.
7. White Eye (*Zosterops lateralis*).—Numerous and flocking in winter in the lupinus-manuka part of the country.
8. Chaffinch (*Fringilla coelebs*).—Occasionally a few birds observed.
9. Goldfinch (*Carduelis carduelis*).—A few observed, though less numerous.
10. House Sparrow (*Passer domesticus*).—Occasional visitor to the beach.
11. Song Thrush (*Turdus ericetorum*).—Scarce in the lupinus-manuka shrub.
12. Blackbird (*Merula merula*).—Some observations in same surroundings—slightly more abundant.
13. Lark (*Alauda arvensis*).—Numerous all year round; flocking in June.
14. Starling (*Sturnus vulgaris*).—Plentiful all the year around the estuary. On 18th April between 5.30 and 6.30 p.m., large flocks of birds, numbering from a few hundreds to several thousands, all moving along the coast from north to south. Owing to a strong wind they were taking shelter, flying behind the first line of dunes. Estimated the approximate number to be between 20,000 and 30,000 birds. The roosting place unknown, although on other occasions flocks numbering hundreds of birds seen at dusk moving and crossing the channel in order to roost somewhere on Kapiti Island.
15. White-backed Magpie (*Gymnorhina hypoleuca*) is a frequent and perhaps an unwelcome visitor to the estuary; 2-4 birds were recorded several times in the proximity of the estuary.

Concluding this preliminary report on the avifauna of the Waikanāe estuary after the first year of regular observations, we might suggest that the total number of 44 species of birds observed seems to be an average record for this part of the West Coast of the North Island. More detailed ecological and biological conclusions, including problems of bird protection, should, in the opinion of the writers, be held in abeyance until a second year of regular bird observations will be completed.