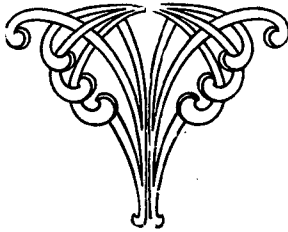


Vol. 2. No. 7.

January, 1948.

New Zealand Bird Notes



Bulletin of the Ornithological Society of New Zealand.
Published Quarterly.

New Zealand Bird Notes

Bulletin of the Ornithological Society of New Zealand.

Edited by R. E. D. STIDOLPH, 114 Cole Street, Masterton.

Annual Subscription, 5/-.

Life Membership, £5.

Price to non-members, 2/- per number.

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MATING OF PIED STILT.—On October 15th, 1946, in the Oreti River bed, about a mile north of Winton, I witnessed the mating of a pair of pied stilts (*Himantopus himantopus*). It was the middle of a dull, cold, windy afternoon. On a sandy stretch three of these birds had been feeding restlessly for some time. Of these, two, apparently males, were constantly quarrelling until a pair flew to some distance and settled. After a short time the female stood quite still, stiff-legged, head to the wind, tail, head and beak all on a level and with the head tucked back hard into the "shoulders." Thus she presented a firm platform that reminded me, somehow, of an aircraft carrier. For a while the male took no notice continuing to feed here and there. When well to leeward he flew into the air, ten feet high, whence he gradually lowered himself with unerring accuracy in spite of the high wind. Alighting gently with legs at full stretch, he stood poised with either foot on the firm, folded wing surfaces. Gradually, and almost gingerly, he folded up his long legs till both bodies met. Even then he needed great skill in the art of balancing. When the action was completed she straightened up suddenly while he as suddenly slid off backwards but landed squarely on his feet. For a moment they seemed to gaze at each other as in astonishment before running off in opposite directions to feed as though they had never met before. By contrast to the above deliberate process, I saw the flash-like action of the male hedge-sparrow (*Prunella modularis*) where the contact is so quick that the eye can hardly detect just how it happens.—W. M. Burrows, Gore.

Dr. W. R. B. Oliver has taken up his duties as Director of the Canterbury Museum.

PRESENT DISTRIBUTION OF N.Z. ROBIN.—II.

By C. A. FLEMING, Wellington.

Since the publication of the first note on the distribution of the New Zealand Robin (*Miro australis*) (see Vol. 2, No. 2, p. 24) numbers of new records have been collected owing to the response of members and others to requests for information. Acknowledgment is made to the following contributors to both sets of records: Messrs. F. L. Newcombe, R. J. Keane and other officers of the Internal Affairs Department, Dr. R. A. Falla, Majors G. A. Buddle and R. A. Wilson, Messrs. W. H. Dawbin, J. M. Heise, E. W. Hursthouse, A. C. Henderson, M. Gage, H. R. McKenzie, A. C. O'Connor, R. St. Paul, A. A. Savell, R. J. Scarlett, W. A. Watters and H. W. Wenham.

The following localities are additional to those already published and include some accepted records from literature, including Drummond's lists (1907). It may be noted in parenthesis that the Kaweka and Ahimanawa ranges were listed in error as "rivers" in the first note.

North Island.—Raglan (1907, Drummond); Waitawhata Valley, Wai-kino (about 1926, R.A.F.); Tokoroa-Atiamuri Road (1945, W.H.W.); Waitaiki Stream, Ohakune (A.C.H.); Raetihi-Pipiriki Road, Waimarino Stream, Makino Rd., Murumuru Rd., Kahura Track (localities between Main Trunk and Wanganui River, A.C.H., and J.M.H., 1946-47); Tuhua Ranges (Reischek, 1882); Waitotara backblocks (Drummond, 1907); Wai-kohu (1898) and Maungahaumia (1906), East Coast (J. C. M'Lean); Minginui, Urewera (R.St.P.); Horomaunga Gorge, Galatea (G.A.B.); Waiopahu Track (A.A.S.); Wainuiomata (Drummond, 1907); Orongorongo and behind Mahina Bay (unconfirmed records, F.L.N., 1946 and E.W.H.) Buller's (1905) report from Whale Island is not here accepted.

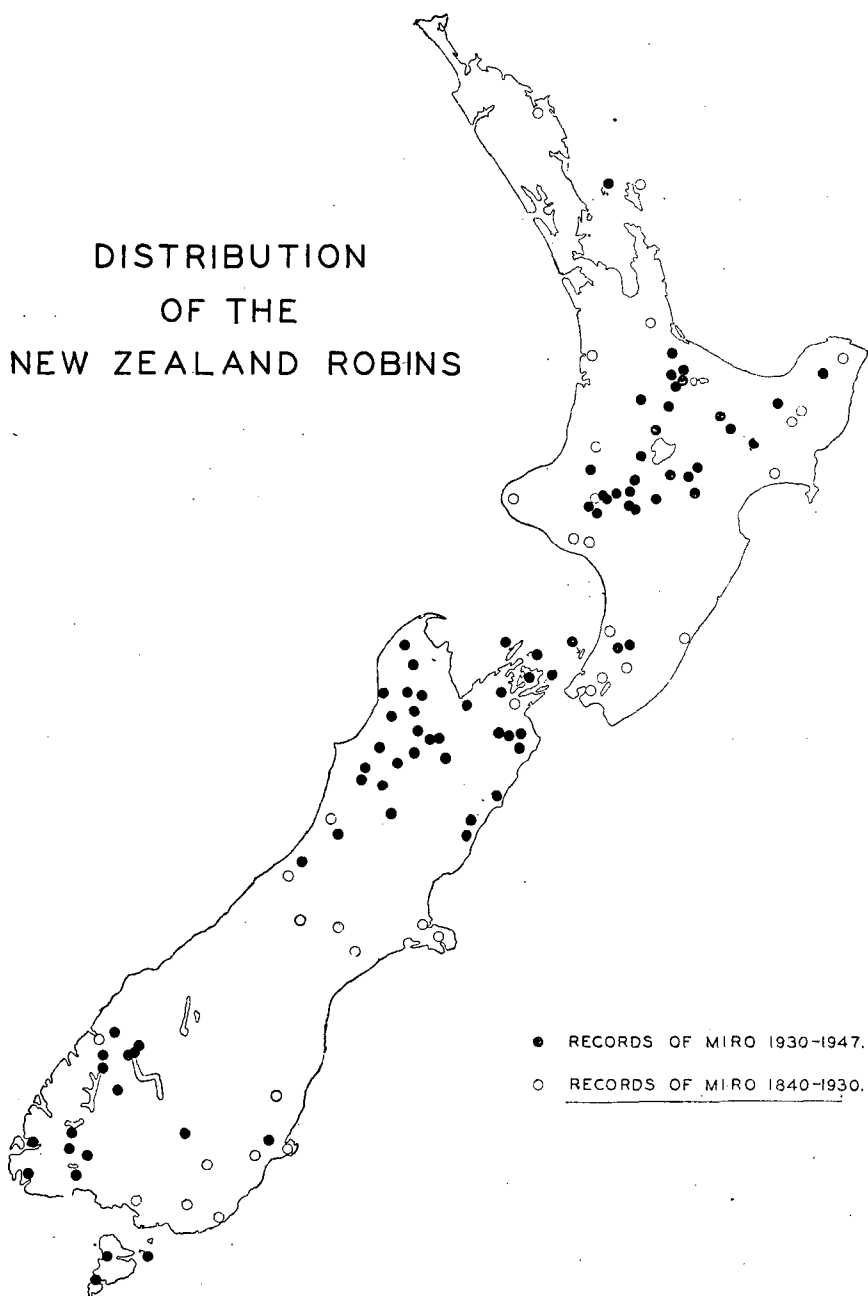
South Island.—Picton-Blenheim (Handley, 1894); Mokihinui River (1935, Moncrieff); Wangapeka (1934); Mt. Travers (1947); Rahu Saddle (W.A.W., 1945); Lanky's Gully, Reefton (M.G.); Totara Saddle, Ross (M.G., 1940); L. Brunner (1888, W. W. Smith); Parnassus (1946, R.A.F.); Waihemo and Tautuku, Otago (Drummond, 1907); Port Chalmers (about 1893, R.A.W.); Rees Valley and Mavora Lake (W.A.W., 1946); Winton (1901, skin); Wyndham and Waianiwa (1907, Drummond).

Stewart Island.—Behind Mason Bay (W. Dawbin, 1945); Lower Freshwater Valley (W.A.W., 1942).

In a summary of the position on the main islands, it may be said that the robin persists in the bushed areas around the Taupo-Rotorua depression, but is scarce or absent from the radiating peninsulas of the North Island—N. Auckland (no confirmed contemporary records); East Cape (scarce); Taranaki (virtually gone); and Wellington (scarce). In the South Island, the robin is persistent over most of Nelson and parts of Marlborough, absent from most of Canterbury, scarce in Westland (?), and eastern Otago-Southland, but persists from the head of Lake Wakatipu to the Waiau in the west.

The following additional records were received too late for indication on the map:—North Island: Kapara, Waitotara River (T. Andrews); Ngamatapouri, Waitotara Valley (A. R. Annabell, per J. Morland); junction of Ohau and Ohauti rivers (T. Andrews).

DISTRIBUTION
OF THE
NEW ZEALAND ROBINS



CONTRIBUTIONS TO THE GANNET CENSUS.

IX.—FURTHER VISITS TO WAIHEKE GANNETRY.

By V. I. CLARK and T. M. ROBERTS.

Horuhoru (Gannet Rock, Waiheke) was visited on December 29, 1946, and again on February 21, 1947, to observe breeding gannets (*Moris serrator*).

On December 29 our time on the rock was limited so that only on North Stack were the contents of nests analysed. The main rock was divided into three areas for counting the total occupied and new-empty nests. The proportions of eggs, chicks and empty nests in these areas seemed to be approximately the same as at North Stack, where the figures were: New nests, 21; chicks, 35 (1 light down, 34 all white); eggs, 38; total, 94 nests.

On February 21 counts were made of the chicks that remained and of the visible dead chicks in the same areas. All the young were feathered, but not quite to the flying stage, but the dead chicks included some in down.

The counts may be summarised as a table, using the areas designated on Fleming's map (N.Z. Bird Notes, Vol. 2, No. 5, p. 110):—

	Total Nests, Dec. 29, 1946	Feathered Chicks Feb. 21, 1947
South Group	35	9
Central Group	144	30
North and North Central	43	8
North Stack	94	8
Total Occupied Nests	316	Surviving Chicks 55
Dead Chicks	2	8 (6 in Central gp.)

X.—SUMMARY OF CENSUS WORK AT WAIHEKE. 1946-47.

By C. A. FLEMING, Wellington.

The accompanying diagram summarises the Horuhoru gannet counts made by Fleming, Cunningham (N.Z. Bird Notes, Vol. 2, No. 5, p. 109), Clark and Roberts (ante), during the 1946-47 breeding season. For the October and December visits, the data plotted have been obtained by applying the proportions of recognisable empty nests, eggs, and chicks in sample counts to the total counts, a procedure justified by the observers' belief that their samples were representative of the whole gannetry, and valid within certain limits.

Features to be noted are:—The high initial population, the great loss of eggs and abandonment of nests during the season, the suggestion of further laying in December (depending on the validity of the sample counts), and the steady mortality of chicks during the latter part of the season. About 58% of the chicks present on December 1 had disappeared by February 21, some possibly by leaving the colony as flying juveniles, but most undoubtedly by death. The death rate of chicks appears to be from 3% to 7% per week. There was an extremely low percentage of nesting successes: for every 100 pairs of gannets which prepared to nest in September, only 4 or 5 chicks can have survived. The reasons for such poor success, and whether it is a normal phenomenon,

HORUHORU GANNETRY

WAIHEKE

1946-1947

OCT.2

1000

1000

EMPTY

DEC.1

500

NESTS

500

DEC.29

EGGS

FEB.21

CHICKS

0

0

October	November	December	January	February
1	9	4	6	
			1	9
			4	7

are problems which require more data, in other years and at other gannetries, for their solution.

GANNETS OF THE THREE KINGS (Vol. 2, No. 6, p. 130).—Correction: It was stated that there were no nesting colonies of gannets or gulls on West King, North-east King and Great King. Actually, there are several very large breeding colonies of red-billed gulls (*Larus novaehollandiae*) on Great King.—G. A. Buddle.

MAHUKI GANNETRY, GREAT BARRIER.—(Vol. 2, No. 6, plate 1) The lower photograph was taken on 28/2/34, and not on 28/11/34 as stated.

NUMBER OF KEAS.—The following figures, supplied by courtesy of the Department of Internal Affairs, whose permission I have to publish them, were compiled by the Department of Agriculture from the amount of the subsidy paid to county councils and represent the number of keas (*Nestor notabilis*) destroyed on which bounties were claimed. Figures are given for 1943, 1944 and 1945 in that order, followed by the total in each case:—Nelson: Waimea C.C., nil, nil, 84, 84. Marlborough: Marlborough C.C., nil, nil, 49, 49. Westland: Westland C.C., 175, 387, 757, 1319. Canterbury: Amuri C.C., 246, 57, 58, 361; Tawera C.C., nil, 6, 96, 102; Selwyn C.C., 59, 93, 160, 312; Ashburton C.C., 77, 27, 166, 270; McKenzie C.C., nil, nil, 255, 255. Otago: Waitaki C.C., 122, nil, 139, 261; Vincent C.C., 592, 207, 265, 1064; Lake C.C., 1059, 888, 795, 2742. Totals: 2330, 1665, 2824, 6819.—J. M. Cunningham.

BIRDS AT HALKETT.—Birds recorded at Halkett, Canterbury, 15-18 miles west of Christchurch (see classified notes for scientific names): Observed in the district every day: Black-backed gull, blackbird, chaffinch, circl bunting (?), goldfinch, greenfinch, harrier, hedge-sparrow, white-backed magpie, little owl, pipit, Californian quail, redpoll, rock pigeon, skylark, sparrow, starling, thrush, yellow-hammer. Seen seasonally or occasionally: Black-billed gull, Canadian goose, Caspian tern, fantail, grey warbler, kingfisher, pheasant, pied stilt, black shag, black swan, black-fronted tern, white-eye, grey duck, rook, banded dotterel. Seen rarely: Pukeko, shining cuckoo. Birds that fly in late afternoon or evening towards Waimakariri River bed from paddocks: Black-backed gull, black-billed gull, white-backed magpie, Caspian tern, black-fronted tern, Canadian goose, sometimes grey duck and black swan.—Halkett School Group.

CRESTED GREBE IN SALT WATER.—This morning, 30/10/47, I was surprised to see a crested grebe (*Podiceps cristatus*) swimming and diving in the Heathcote Estuary. The bird swam with the outgoing tide for about 50 yards, doing an occasional dive, and then swam back, passing within twenty yards of me and performed a dive right in front of myself and a neighbour. Its crest was bright chestnut when viewed from the front and the bird looked to be in good condition. There had been three days of strong southerly wind, with a very cold atmosphere and almost continuous rain—this no doubt was responsible for this most unusual visitor. Dr. R. A. Falla can find no previous record of grebes in salt water in New Zealand.—G. Guy, Christchurch.

CLASSIFIED SUMMARISED NOTES.

LIST OF CONTRIBUTORS.

T. Andrews, Palmerston North.	G. K. McKenzie, Clevedon.
I. E. Barton, Kahautara.	H. R. McKenzie, Clevedon.
B. D. Bell, Waihopai.	Mrs. R. V. McLintock, Halkett.
A. A. Boulton, Wellington.	W. P. Mead, Wanganui.
P. C. Bull, Mangere.	J. Middleditch, Cromwell.
W. M. Burrows, Gore.	J. M. Moreland, Wanganui.
O. Cheesman, Auckland.	G. C. Munro, Honolulu.
M. M. Chisholm, Molesworth.	F. Murray, Clevedon.
V. I. Clark, Pukerua Bay.	C. Parkin, Little Barrier.
T. Cockcroft, Wellington.	C. M. Roberts, Clevedon.
J. M. Cunningham, Masterton.	T. M. Roberts, Clevedon.
R. A. Daniell, Masterton.	F. H. Robertson, Hawke's Bay.
Mrs. M. A. E. Deeming, Opuia.	J. W. St. Paul, Clevedon.
Dunedin Naturalists' Field Club.	R. St. Paul, Minginui.
S. Edwards, Auckland.	A. A. Savell, Levin.
R. A. Falla, Christchurch.	H. L. Secker, Wellington.
C. A. Fleming, Wellington.	D. J. Shaw, Clevedon.
Mrs. M. A. Fleming, Wellington.	R. B. Sibson, Mangere.
D. H. Graham, Lower Hutt.	P. A. S. Stein, Auckland.
L. Gurr, Dunedin.	R. H. D. Stidolph, Masterton.
G. Guy, Christchurch.	D. N. Strang, Auckland.
H.S.G., Halkett School Group.	Mrs. I. Tily, Dunedin.
Miss M. Hogwood, Whangarei.	E. G. Turbott, Auckland.
W. F. I. Hunt, Te Kuiti.	D. A. Urquhart, Karaka.
E. W. Hursthouse, Mahina Bay.	A. H. Watt, Parengarenga.
B. Iorns, Masterton.	E. O. Welch, Mt. Bruce.
M. E. Johnson, Auckland.	P. E. White, Dog Island.
C. Lindsay, Wellington.	A. S. Wilkinson, Levin.
L. W. McCaskill, Christchurch.	K. Wodzicki, Wellington.
Mrs. C. W. McLatchie, Hilderthorpe.	

Included in notes supplied by the Dunedin Naturalists' Field Club are contributions from Mrs. G. F. Nicholls, Miss D. Mackie, Miss Robertson, Miss E. McElrea, Miss Farquharson, Mrs. Ancell, Mrs. P. L. Moore, Mrs. J. Hickman and Messrs. W. Davidson and W. Martin.

Records of particular interest include the wintering of lesser golden plover and turnstone in Manukau Harbour, a red-capped dotterel in Canterbury sitting on two eggs, a southern skua in North Auckland, a kookaburra at Punakaiki in the South Island, an Australian barn owl in Westland and the first reported occurrence of the black-backed magpie in the North Island.

BROWN KIWI (*Apteryx australis*).—Parua Bay, Whangarei, heard not infrequently.—(M.H.) Rakiahua, Stewart Island, apparently numerous.—(W. Martin, D.N.F.C.)

KIWI (*Apteryx* spp.)—Lake Manapouri, Otago, Dec., 1946, reported by launchman as plentiful, two young caught recently and liberated.—(W.M.B.)

ERECT-CRESTED PENGUIN (*Eudyptes sclateri*).—Palliser Spit, 5/7/47, old corpse.—(J.M.C.) Several adult females were again, as in other years, recorded as undergoing annual moult on parts of the Canterbury coast. (a) Came ashore Sumner, March 29, old plumage loosened April 5, new plumage complete except for tail May 7; (b) came ashore, Longbeach, May 11.—(R.A.F.)

LITTLE BLUE PENGUIN (*Eudyptula minor*).—Castlecliff, 30/6/47, one coated with oil; fed on meat with cod liver oil and fish while being cleaned up and had increased over a pound in weight when released.—(W.P.M.)

WHITE-FLIPPERED PENGUIN (*Eudyptula albosignata*).—Cave Rock, Sumner, 23/1/47; newly-fledged young bird picked up in weak condition.—(R.A.F.) Diamond Harb., Lyttelton, 3/12/45, seven occupied nests, one with two eggs, remainder one egg each. Two broken eggs, rolled out, one half hatched and other fresh.—(G.G.)

DABCHICK (*Poliiocephalus rufopectus*).—Te Arai lakes, south of Mangawai, N. Auckland, one seen, 1935.—(G.K.McK.) Lake Rotorua, May, 1947, 12 plus off Sulphur Point; Lake Rotomahana, 16/5/47, c. 47 in loose flotilla.—(R.B.S.) Lake Tutira, 12/7/47, one with black teal. (J.M.C., T.C.)

DIVING PETREL (*Pelecanoides urinatrix*).—During 1946 corpses found at Lyall and Ohariu bays, Wellington, with oil on plumage.—(H.L.S.)

WHITE-FACED STORM PETREL (*Pelagodroma marina*).—25/9/46, Plentiful in small flocks between Motutapu and Tiri islands.—(S.E.) Noises, 1/12/46. Some birds sitting on single egg, others in burrows without an egg.—(R.B.S.)

CAPE PIGEON (*Daption capensis*).—Wellington Heads, 10/2/46, 25 several miles south-east of Sinclair Head.—(H.L.S.)

GIANT PETREL (*Macronectes giganteus*).—Awhitu, Aug., '46, one dead; near North Head, Auckland, 6/12/46, six together.—(R.B.S.) Sumner, 12/4/47, immature-plumaged bird ashore alive.—(R.A.F.)

BROAD-BILLED PRION (*Pachyptila vittata*).—Additional records to those mentioned as storm-killed, Aug., '46 (Vol. 2, No. 2): Puhinui, 5; Te Henga (Bethell's), 8; Awhitu, many; one Muriwai, 26/6/47.—(R.B.S.) Lyall Bay, 6/10/46, one decomposed corpse, culmen 35mm.—(H.L.S.) Pukerua Bay, 20/4/47, four corpses dating from February storm.—(V.I.C.) Usual mid-summer records of immature birds blown inland, Canterbury, January, 1947; adult female in incubating condition found dead, Westport Municipal Baths, 29/9/47.—(R.A.F.)

LESSER BROAD-BILLED PRION (*P. salvini*).—Pakiri, 22/6/47, one dead, interesting record for the Hauraki Gulf.—(H.R.McK.) Lyall Bay, 31/8/46, fresh corpse.—(H.L.S.)

SLENDER-BILLED PRION (*P. belcheri*).—Te Henga, one killed in big August gale, 1946.—(R.B.S.) Muriwai, 29/6/47, one.—(E.G.T. and D.N.S.)

DOVE PRION (*Pachyptila desolata*).—Pukerua Bay, 20/4/47, seven corpses dating from February storm.—(V.I.C.) South Brighton, 13/7/47, one found dead.—(R.A.F.)

FLESH-FOOTED SHEARWATER (*Puffinus carneipes*).—Outside Ponui Is., 19/10/46—4/5/47. A few seen early in season, but several hundreds usually in later part; several hundreds on 4/5/47.—(T.M.R.)

BULLER'S SHEARWATER (*P. bulleri*).—Outside Ponui; scarce throughout season; four on 4/5/47.—(J.M.R.) Between Rangitoto and St.

Heliers, one, 5/4/47.—(R.B.S.). Te Hope, Coromandel, 29/12/46, several close inshore with *P. carneipes*.—(E.G.T.)

MUTTON BIRD (*P. griseus*).—Te Awaiti, East Coast, Wairarapa, 28/12/46, at least 12 heard flying overhead at night.—(R.H.D.S., A.S.W., J.M.C.) Pukerua Bay, 20/4/47, two corpses dating from February.—(V.I.C.) Day's Bay, Wellington, 9/2/47, one heard, 8.30 p.m.—(A.A.B.) April and May, 1947, several picked up dead on Canterbury beaches.—(R.A.F.) Tomahawk, Dunedin, 14/10/46, many flying south; Bluff, 12/4/47, hundreds flying along coast.—(G.G.) Purakanui, Otago, 18/12/46, 5, 7 and 8/2/47, calling at night; 8/2/47, 15-20 flying low over water mostly single, occ. 2 together; near entrance Otago Harb., 12/2/47, flock of 60-70 diving among flock of gulls.—(I.T.) Porpoise Bay, Southland, 15/2/47, several hundred feeding offshore.—(K.W.)

FLUTTERING SHEARWATER (*P. gavia*).—Outside Ponui, 19/10/46—4/5/47, usually plentiful.—(T.M.R.) Lyall Bay, 6/10/46, several corpses, culmens of two: 37 and 33mm. latter with whitish latericorn plates; Ohariu Bay, 23/12/46, close inshore in heavy gale; Tongue Point, 23/2/47, abundant offshore, associating with *Sterna striata*, but not observed in that area on 6/4/47.—(H.L.S.) Pukerua Bay, 20/4/47, five normal and three with long thin bill of subspecies *huttoni*.—(V.I.C.)

WHITE-CHINNED PETREL (*Procellaria aequinoctialis*).—Muriwai, 20/11/46, non-breeding male just ashore, freshly dead.—(P.C.B.)

COOK'S PETREL (*P. cookii*).—First heard coming in at Little Barrier, 7.55 p.m., 17/9/47.—(C.P.)

WANDERING ALBATROSS (*Diomedea exulans*).—Muriwai, 19/11/46, adult male ashore, sent to Auck. Mus. by D. McKenzie.—(E.G.T.) Matarawa, Wanganui, 18/2/47, immature (white face) banded, and released.—(J.M.M.)

ROYAL ALBATROSS (*D. epomophora*).—Awhitu, 1946, one dead in August gales, per L. N. Rutherford; one dead at Muriwai, early September, 1947 and sent to Auck. Mus. by Mr. D. McKenzie.—(E.G.T.) Castlecliff, 10/11/46, male (*sandfordi*) ashore alive, damaged wing.—(J.M.M.)

WHITE-CAPPED MOLLYMAWK (*Thalassarche cauta*).—Awhitu, one dead in August gales, 1946; per B. S. Irwin.—(E.G.T.) Castlecliff, 16/2/47, three immature (*salvini*); two males, one female.—(J.M.M.) Palliser Spit, 5/7/47, adult female corpse (? *D. c. cauta*).—(J.M.C.)

BULLER'S MOLLYMAWK (*T. bulleri*).—Palliser Spit, 5/7/47, corpse, male, brood patch.—(J.M.C.)

GREY-HEADED MOLLYMAWK (*T. chrysostoma*).—Muriwai, June, '47, four (3 adults, 1 juvenile).—(E.G.T. and D.N.S.) Lyall Bay, 18/5/46, one corpse, culmen 108, basal breadth 28mm.—(H.L.S.)

LIGHT-MANTLED SOOTY ALBATROSS (*Phoebastria palpebrata*).—Near Dargaville, 23/1/47, remains of one found on west coast, possibly a wreck from previous August gales.—(D.A.U.) Palliser Spit, 5/7/47, corpse, immature female.—(J.M.C.)

BLACK SHAG (*Phalacrocorax carbo*).—Wangaehu River, Wanganui, 20/8/47, adult female with prominent filoplumes.—(J.M.M.) Tongue Point, 2/1/47, six; Hutt River Mouth, 19/1/47, 23.—(H.L.S.) Immature

bird took up feeding territory on the river in the city area of Christchurch throughout August, 1947, also seen feeding on carp in Victoria Lake.—(R.A.F.) Stewart's Gully, 26/8/47, 50-60 in Waimakariri Estuary swimming and diving at rise of tide.—(H.S.G.) Albury Park Station, 15/1/47, up to six seen on earth pillars by Te Ngawai River.—(R.V.McL.) Westland: one feeding in Okarito Lagoon, 28/4/47; about 20 resting on rocks at Bruce Bay, 29/4/47; common off Hokitika Beach. They could be seen flying north in the afternoons. One bird registered between 30 and 35 m.p.h. (paced by car) against a light head wind, April.—(B.D.B.)

PIED SHAG (*P. varius*).—Ponui Island, 25/1/47, 60 plus nests; colony reduced owing to falling down of some pohutukawas.—(T.M.R., G.K.McK., D.J.S.)

WHITE-THROATED SHAG (*Phalacrocorax melanoleucus*).—Ponui Island, 25/1/47, c. 30 nests among pied shags; many young about; no birds sitting.—(T.M.R., G.K.McK., D.J.S.) Westland: One resting on rocks at Bruce Bay, 29/4/47.—(B.D.B.)

LITTLE BLACK SHAG (*P. sulcirostris*).—Bay of Plenty, 15/5/47, Whakatane 8 and Matata Lagoon 6.—(R.B.S.) Party 12-18 seen several times at Maraetai, near Clevedon, during July and August.—(H.R.McK., D.J.S.)

SPOTTED SHAG (*Stictocarbo punctatus punctatus*).—Noises Islands, 1/12/46, 150 plus at main colony in cave; juv. mostly at flying stage. At Big Noise outlying colony of c. 10 nests, but only 2 adults and 2 juv. seen. At Anita Bay colony on N.E. corner of Waiheke, were 70-80 birds, including many flying juv.—(R.B.S.) T.M.R. visited this colony on 28/12/46 and reported c. 55 occupied nests each containing one, two or three eggs or young; c. 100 often roost N.E. Ponui. The colony was again visited on 25/1/47 by H.R.McK., G.K.McK., C.M.R. and D.J.S. who reported about 50 nests with c. 55 young, some of which were tiny chicks. This shows big increase of nesting birds from previous September, when it was estimated that there were 17-20 pairs. (v. Vol. 2, No. 3.) 23/2/47, nests deserted; many juv. still about.—(H.R.McK.) Kaikoura, near wharf, 18/3/47, c. 250.—(G.G.) Scarborough, Sumner, 21/10/45, sitting on nests without eggs.—(G.G.) Specimens of females in full ornamental plumage were picked up on Canterbury beaches north of Banks Peninsula, 27/9/46 (had been shot). Breeding population along 15 miles of north coast, Banks Peninsula, estimated 5-6000, Sept., 1947.—(R.A.F.) Purakanui, Otago, 8/2/47, fifty counted in flight from flock at sea estimated to be at least 150.—(I.T.) Curio Bay, Southland, 15/2/47, 20-30 birds.—(K.W.)

BLUE SHAG (*S. p. steadi*).—Correction: Record of colony at Purakanui, Otago, recorded N.Z. Bird Notes, Vol. II. p. 40, should have been spotted shag (*S. p. punctatus*).—(I.T.)

GANNET (*Moris serrator*).—Off Ponui, 5/4/47, 2 juv. in spotted plumage among adults.—(T.M.R.) 18/1/47, one flew up Clevedon River at high tide to limit of slightly brackish water.—(H.R.McK.) Castlecliff, 22/2/47, several passed, apparently going north.—(W.P.M.) Castlepoint 5-7/4/47, odd birds; Palliser Spit, 25/5/47, more than 20.—(J.M.C.) Tongue Point, six, 2/1/47; one, 23/2/47; one, 6/4/47.—(H.L.S.) Pukerua

Bay, one corpse, 20/4/47.—(V.I.C.) Purakanui Bay, Otago, 8/2/47, two and then five flying swiftly near water; very misty.—(I.T.) Westland: Three flying north twenty yards off Hokitika River bar, 2/4/47; one off Hokitika River bar, 23/4/47.—(B.D.B.)

WHITE HERON (*Casmerodius albus*).—Tinopai, Kaipara, 20/9/47. A yellow-billed bird observed by F. Chignell.—(E.G.T.), Wairarapa Lake, one bird, Sept. 5, 6, 9, 11, 12, 15, 17 and Oct. 8, 17, 1946.—(I.E.B.) The report of the ranger, Mr. T. Casey, for the 1946-47 season at the white heron sanctuary on the Roto Creek, South Westland, is that the colony made a good start in September with 8 nests occupied. By the beginning of October there were 12 in all, associated with the usual large colony of white-throated shags. As two of the sitting herons finally did not lay, the total number of occupied nests was therefore the same as in 1945-46. By the end of January, 11 young birds had been successfully reared and had flown. This is fewer than the two previous seasons and Mr. Casey believes that the bad hatch was due to the unusually cold and wet weather in November and December.—(R.A.F.) Westland: One on top of dead kahikatea at Koiterangi, 13/4/47; one standing on shingle bank beside railway bridge across Hokitika River, 26/4/47.—(B.D.B.)

WHITE-FACED HERON (*Notophoxys novaehollandiae*).—Waldegrave Road Lagoon, Palmerston North, 21/4/47, one.—(T.A.) Reports indicate numbers possibly increasing in Westland.—(R.A.F.) One at Lake Mapourika, 3/5/47.—(B.D.B.)

REEF HERON (*Demigretta sacra*).—Nest found in mass of *astelia banksii* high up on rocky face on islet off Waiheke.—(H.R.McK.) Lyall Bay, 18/5/46, two in persistent chase; Hutt River Estuary, 19/1/47, two in chase, pursuing bird twice extending its neck; rapid croaking cries heard; Ohariu Bay, 23/12/46, one; Tongue Point, 6/4/47, one.—(H.L.S.) McCormack Bay, Sumner, 30/11/45—3/12/45, and on 23/7/46, one; 22/9/47, reappeared; 23/9/47, another in Monck's Bay; 30/9/47, both still present.—(G.G.) Seen in small numbers during the year at various points round Banks Peninsula from Heathcote Estuary to Lake Forsyth. 1946-47 nest found near Pigeon Bay among rocks on coast.—(R.A.F.) Coast near Warrington, n. of Dunedin, 3/6/47; three near Waitati.—(G.G.) Kaikorai Stream, Otago, 1/2/47, one; Purakanui Inlet, 8/4/47, two; Akatore River tidal flats, 16/4/47, one.—(I.T.)

BITTERN (*Botaurus poiciloptilus*).—Five nests found in crater-swamp by members of King's College Bird Club. On 8/12/46, 3 nests contained five down young each; 1 nest had 1 young hatched, 2 eggs chipping, and 2 still intact; and fifth nest, which few days before had only two eggs, now had clutch of five. In all five nests size of clutch was five.—(R.B.S.) Lagoon by Nukumarū Station, 5/3/47, one seen; Waitotara Beach Lagoon, 4/6/47, two.—(W.P.M.) Turakina Mouth, 15/3/47, one.—(J.M.C.) Te Awanga Lagoon, near Hastings, 19/5/47, rare visitor, no previous record.—(E.W.H.) Tongoi Lagoon, Napier, 12/7/47, five.—(T.C., J.M.C.) Waikouaiti River, 9/10/46, one; Kaikorai Stream mouth, 5/11/46 and 1/2/47, one.—(I.T.)

ROYAL SPOONBILL (*Platalea regia*).—What was evidently one was seen for some days by boatman in Manukau Harbour near Onehunga-Mangere Bridge in winter of 1945 and reported to Dr. Falla.—

(R.B.S.) Waitotara Estuary, 23-28/10/46, two; local residents saw one previously at same time of year (whitebait season) in either 1944 or 1945.—(W.P.M.) Manawatu River estuary, 15/7/46, three roosting on left bank.—(K.W.)

PARADISE DUCK (*Tadorna variegata*).—Waimangu, Lake Rotomahana, 9/2/47, 67; Lake Kaitoki, Wanganui, 18/5/47, c. 25.—(P.C.B.) Matata Lagoon, Bay of Plenty, 15/5/47, 7 (1 male, 6 females).—(R.B.S.) Increasing Owaka Valley, near East Coast, per P. C. Hindmarsh.—(R.B.S.) Lake Tutira, 12/7/47, 18.—(T.C., J.M.C.) Wanganui Estuary, 24/1/47, two immature; this species not present in district eight years ago.—(J.M.M.) Hutt River Estuary, 22/5/43, male flying upstream.—(H.L.S.) Lake Te Anau, Otago, Dec., 1946, two with six ducklings.—(W.M.B.) Otago, 26/11/46—3/12/46, from Pataroa to Styx, one pair and in different locality four young in flight. South of Styx along Taieri River, the Serpentine, about one dozen pairs, one pair having at least nine young and another three; seven young birds in flight together.—(I.T.) Westland: Two pair seen from road between Hari Hari and Waiho, 28/4/47; one pair in stream running from Lake Matheson, 30/4/47.—(B.D.B.)

GREY DUCK (*Anas superciliosa*).—N. of Foxton, 23/9/47, one with nine recently hatched young.—(A.A.S.) Stewart's Gully, Canterbury, 25/8/47, about 50 on pond.—(H.S.G.)

GREY DUCK-MALLARD CROSSBREDS (*Anas superciliosa* x *A. platyrhynchos*).—St. Bathans, Otago, 23/2/47, seven on tarn.—(K.W.)

GREY TEAL (*Anas gibberifrons*).—Waimangu, Lake Rotomahana, 16/5/47, c. 45.—(R.B.S.) Small numbers seen on Lake Ellesmere during shooting season, May-June, 1947.—(R.A.F.)

BROWN DUCK (*Anas chlorotis*).—Port Albert, Kaipara, pair reported to have bred by Mr. W. K. Becroft (H.R.McK.) Parua Bay, 27/3/47, two on small pond.—(M.H.)

SHOVELLER (*A. rhynchotis*).—Several pairs noted from Thames Road, Maungatawhiri Swamp, spring, 1946; Matata Lagoon, 15/5/47, hundreds; Hamurana and Waimangu, mid-May, 1947, scores.—(R.B.S.) Miranda, Firth of Thames, 13/9/47, male.—(H.R.McK. and E.G.T.)

BLACK TEAL (*Aythya novaeseelandiae*).—Lake Rotorua, near Ward Baths, 16/5/47, c. 280; Waimangu, Lake Rotomahana, 16/5/47, c. 40; Lake Rotoiti, c. 120, and Hamurana Springs, c. 70, 18/5/47.—(R.B.S.) Lake Tutira, 12/7/47, c. 249.—(T.C., J.M.C.) Lake Manapouri, Otago, Dec., 1946, one with five ducklings.—(W.M.B.) Westland: Two pair on Lake Kaniere, 6/4/47.—(B.D.B.)

BLACK SWAN (*Cygnus atratus*).—Estuary, Sumner, 23/2/46, seven.—(G.G.) Jacob's River, Riverton, 17/2/47, dozen feeding.—(K.W.) Otago Harbour, 14/1/47, two flying N.; 7/2/47, two over fields of Peninsula; 23/2/47, c. 12 flying S. over harbour at 8 p.m.—(Mrs. G. F. Nicholls, D.N.F.C.) Westland: About 28, Okarito Lagoon, 28/4/47; four on Lake Mapourika, 3/5/47.—(B.D.B.)

WHITE SWAN (*Cygnus olor*).—Stewart's Gully, Canterbury, 26/8/47 two seen.—(H.S.G.)

CANADIAN GOOSE (*Branta canadensis*).—Halkett, Canterbury, 3/11/46, female sitting on nest in grass paddock; m. stands alongside; two goslings hatched same week.—(R.V.McL.) Lake Clearwater, Ashburton Gorge, 6/7/46, flock of c. 100; Rangititi River, 7/7/46, c. 100, possibly same flock.—(Miss D. Mackie, D.N.F.C.) Wanaka area, 22/8/46, reported increasing.—(I.T.)

BUSH HAWK (*Falco novaeseelandiae*).—Aramoho, Wanganui, 14/8/47, few immature birds descend to town belt each winter.—(J.M.M.) Lillburn Bush, Southland, 17/2/47, heard, reported present.—(K.W.) Westland: One inland from Bruce Bay, 29/4/47.—(B.D.B.)

HARRIER (*Circus approximans*).—Waitotara Estuary, 31/5/47, numerous; rabbits also abundant.—(K.W.) East Coast, Wairarapa: See under red-billed gull.—(J.M.C.) Leith Valley, Dunedin, 1/6/46—31/5/47, five single birds seen; Dunedin to Waiaakaru, 44 miles, 9/10/46, 19; Dunedin, via Palmerston, to headwaters of Shag River, 36 miles, six; thence to Styx Hotel, 68 miles, 21; Styx Hotel to Palmerston via Hyde and Macraes, about 96 miles, 3/12/46, 28.—(I.T.)

CALIFORNIAN QUAIL (*Lophortyx californicus*).—Lower reaches of Karori Stream, Nov., 1946—April 1947, rare.—(H.L.S.) Two eggs found in blackbird's nest containing the owner's five eggs during the season 1946-47 at Cromwell, Central Otago, by Mr. K. A. Lawrence. The blackbird's nest had been built only a foot or two above the ground in fruit-tree prunings.—(R.A.F.) Central Otago, 1/12/46, calls heard at Styx, also at Blackball, on old Dunstan Road.—(I.T.) Company Bay, Otago Pen., end of Nov., 1946, seen in garden.—(Mrs. G. F. Nicholls, D.N.F.C.)

PHEASANT (*Phasianus colchicus*).—Scroggs Hill, Otago, 11/2/47, cock seen; are liberated every year but not single clutch reported to be reared. Gollans Valley, Wellington, 24/10/47, present.—(K.W.) Wakari, Otago, 17/6/46, hen seen.—(Miss Roberts, D.N.F.C.)

NORTH ISLAND WEKA (*Gallirallus greyi*).—Opua, Bay of Islands, 3/8/45, few years ago wekas were plentiful, often seen in garden, but after appearance of stoats completely disappeared.—(M.A.E.D.) Port Albert; Mr W. K. Becroft reported first appearance in district about 1900. They increased to great numbers but disappeared about 1920.—(H.R.McK)

SOUTH ISLAND WEKA (*Gallirallus australis*).—Blackball Bridge, near Greymouth, 27/8/47, adult bird smashed by car.—(K.W.) Stewart Is., appear to be none N. of Paterson's Inlet, save one or two at entrance and a pair on Bravo Is. (with four chicks). The weka migrates periodically to different parts of Stewart Is.—(W. Martin, D.N.F.C.)

BANDED RAIL (*Hypotaenidia philippensis*).—Cleveland, increasing. (H.R.McK.) Karaka, 8/12/46, nest five eggs.—(D.A.U.) Haddfield's Beach Creek, 23/12/46, one pair 4 downy black young; parents were feeding in gutter while young hid under grassy bank; as one of the parents moved up from the gutter, young dashed out.—(H.R.McK., R.B.S.) One calling in Tamaki, at Middlemore, 21/10/47; near here some years ago nest was found in long grass round golf bunker by J. K. Waite.—(R.B.S.) Parua Bay, Whangarei, 25/3/47, one seen with youngster.—(M.H.)

MARSH CRAKE (*Porzana tabuensis*).—Cheviot, 16/7/47, adult killed by striking power wires.—(R.A.F.)

PUKEKO (*Porphyrrio poliocephalus*).—Clevendon, 16/9/46—29/1/47. Calls heard at night on eight different dates of single birds flying fast and far. All were between 9.45 and 11 p.m.; 18/5/47, two newly hatched chicks in nest.—(H.R.McK.) Often noted flying over Mangere at night.—(R.B.S.) About 1943, one seen with mouse in bill.—(J.M.C.) Lake Ellesmere, N. side, 29/11/45, many with chicks.—(G.G.) Dunedin, reported 7/5/47 (shooting season), one perched on verandah of draper's shop in main street, remained about locality for some hours before flying away.—(I.T.) Moa Flat, 7/4/47, pukekos eating fresh-water mussels.—(Miss E. McElrea, D.N.F.C.) Westland: Common on the roadsides of all Westland roads, April, 1947.—(B.D.B.)

SOUTH IS. PIED OYSTERCATCHER (*Haematopus finschi*).—Hundreds as usual wintered in Manukau, e.g., 363 at Karaka on 30/3/47 and c. 350 on 13/7/47.—(D.A.U.) c. 150 throughout winter months near Puketutu causeway.—(P.C.B.) Firth of Thames, 25 on 12/1/47; c. 76 on 16/3/47; 10 on 24/10/47.—(H.R.McK., R.B.S.) One in the Tamaki, by Middlemore golf course, seen by J. K. Waite, 27/2/47.—(R.B.S.) Wanganui Estuary, 16/1/47, two resting, low water.—(J.M.M.) Albury Park Station, Te Ngawai River, 15/1/47, six seen foraging several times daily for ten days, time of observer's visit.—(R.V.McL.) Canterbury: About 700 wintered, 1947, in Heathcote Estuary, near Moncks Bay and Redcliffs. They frequented an area further south in estuary than they had occupied for several years. On 7/9/47 only about 300 birds (including one black) were left, the others having moved on over the past fortnight. Shooting of these birds was carried out by "sportsmen" on Sunday mornings during July and August, several shots being fired each week-end; 30/9/47, c. 300 still present. N. end of Lake Ellesmere, 27/3/47, three.—(G.G.) Molesworth Station, Marlborough, 3/9/47, two in Alma River, not there previous day; in same place previous years, pair reared two chicks; 29/8/47, two on Awatere River at mouth of Tone; 31/8/47, two on Awatere at Molesworth.—(M.M.C.) Whitestone River, Otago, Dec. 46, three.—(W.M.B.) Coast near Warrington, N. of Dunedin, 3/6/47, 700-800; Riverton Beach, 22/4/47, four; Riverton Estuary, 22/4/47, over 300.—(G.G.) Jacob's River, Riverton, 17/2/47, three flocks of c. 26, 150 and 60 birds, feeding or roosting; Te Waewae Bay, 17/2/47, five single birds feeding on surf; Mataura River Estuary, 19/2/47, flock of about 70; Hurunui River, near Balmoral State Forest, 20/10/46, four pairs and single bird, piping. Oreti Beach, Southland, 15/2/47, 14 birds feeding in surf.—(K.W.)

NORTH ISLAND PIED OYSTERCATCHER (*H. reischeki*).—Pakiri, 15/12/46, nest 3 eggs (1 bird was typically smudgy, 1 all black).—(R.B.S.) On 3/1/47, they had nest with 1 egg (high tide may have destroyed earlier nest); both birds were seen to sit.—(H.R.McK.) Mangawai Heads, 2/1/47, 1 pair (1 black, 1 broken colour).—(H.R.McK.) Parengarenga, six on 15/8/47.—(A.H.W.) As usual odd N.I. pied oystercatcher with few black (? unicolor) were recorded wintering with S.I. pied oystercatchers in Firth of Thames (Kaiaua) and Manukau (Karaka and Puketutu).—(R.B.S.) Waitotara Beach Lagoon, 5/11/46, two.—(W.P.M.)

BLACK OYSTERCATCHER (*Haematopus unicolor*).—3/5/47, pair at mouth of Waipara River.—(R.A.F.) Heathcote Estuary, 7/9/47, one

with big flock of S.I. pied (G.G.) Colac Bay, 17/2/47, 3 birds completely black, no mottled plumage when flying, appeared slightly larger than *H. reischeki*. Te Waewae Bay, 17/2/47, single bird not associated with *H. finschi*. Porpoise Bay, 19/2/47, 2 birds.—(K.W.) Riverton Beach, 22/4/47, 7.—(G.G.) Westland: 9 feeding in Okarito township, 28/4/47. About 12 groups of 2's and 3's feeding on rocks exposed by low tide at Bruce Bay, 29/4/47.—(B.D.B.)

BLACK OYSTERCATCHER (? species).—Waitotara Estuary, two on 23/10/46; one on 7/11/46; two on 28/7/47; two on 19/9/47; one on 10/10/47.—(W.P.M.)

TURNSTONE (*Arenaria interpres*).—Firth of Thames: 1 on 3/11/46, at Miranda.—(R.B.S.). One on 2/3/47, at Kaiaua.—(H.R.McK.) Manukau, Karaka, c. 40 on 10/11/46; c. 50 throughout December; c. 72 on 26/1/47, 89 on 6/4/47, c. 49 on 11/5/47, 24 on 25/5/47, 10 on 13/7/47, c. 34 on 17/8/47.—(D.A.U.) Puketutu Flats: 75 on 17/1/47, c. 90 on 3/2/47, c. 90 on 3/3/47, 6 on 27/4/47, 2 on 7/6/47 and 20/7/47, 4 on 24/8/47.—(P.C.B., R.B.S.) This is first time that turnstone have been proved to winter in Manukau. Some also wintered at Parengarenga; 11-18/7/47, 6-13 birds inc. 2 in breeding plumage on 12th, 14 on 1/8/47.—(A.H.W.). Waitotara Beach Lagoon, 13/11/46, two.—(W.P.M.)

LESSER GOLDEN PLOVER (*Pluvialis dominica*).—Manukau: (a) Karaka, 12 on 26/10/46, then regularly till 6/4/47, when 35 present; maximum, 54 on 26/1/47; 2 seen in winter on 31/5/47 and 2/6/47.—(D.A.U., R.B.S.) This is first wintering record for Manukau and presumably for New Zealand. (b) Puketutu Flats: Present between 17/1/47 and 3/3/47, greatest number being 16 on 13/2/47.—(P.C.B., R.B.S.) Waitotara Estuary, 21/2/47, one identified but small flock of four birds seen in distance on previous visits during summer, probably same.—(W.P.M.)

BANDED DOTTEREL (*Charadrius bicinctus*).—North side of Clevedon River mouth, 15 on 6/3/47, c. 100 on 27/3/47, c. 150 on 18/4/47, 133 on 29/7/47, 28 on 26/8/47.—(G.K.McK.) Old wintering ground at Whakatiri across estuary used early in season, but later deserted.—(H.R.McK.) 7/4/47, 38 at Waikato Heads.—(H.R.McK., O.C.) 26/4/47, 4 at Ardmore aerodrome, 60 plus Takanini.—(H.R.McK.) 12/5/47, 14 on silica flats, Rotorua.—(R.B.S.) 24/8/47, nest, 3 eggs, Firth of Thames.—(R.B.S., H.R.McK.) 28/9/47, nest, 5 eggs of two distinct types, obviously laid by two females.—(H.R.McK., G.K. McK.) Waitotara Beach Lagoon, from October to December, 1946, two to eight seen on each visit, then increasing to about 50 in June and July, 1947, decreasing again to about 8 from August on.—(W.P.M.) Waikanae Estuary, Aug., 1947, about 4 pairs, some on territory part of day.—(C.A.F.) Lyall Bay, 2/11/46, adult and 2 unfledged young; 18/2/47, three; 16/5/47, 20; several with bright chest bands; 5/7/47, five.—(H.L.S.) Molesworth Station, Marlborough, 3/9/47, flight of 30 in paddock, 4 p.m., appeared to have just finished a journey, largest number ever seen, not there previous day; another 10 birds in tussock at mouth of Severn, tributary of Acheron, same day.—(M.M.C.) Plentiful in pairs on usual nesting grounds in Canterbury, late July. First eggs noticed about 22/8/47.—(R.A.F.) Halkett, Canterbury, 6/10/47, 2 seen.—(H.S.G.) Cromwell Flats, 13/8/47, single bird in morning and another about mile from first at midday. This

is month earlier than I have previously noticed this species and six weeks earlier than some years.—(J.M.) Near Styx, C. Otago, 1/12/46, pair; Blackball-Paerau Road, C. Otago, 2/12/46, pair.—(I.T.)

N.Z. DOTTEREL (*Pluviorhynchus obscurus*).—Parengarenga, 12/7/47, 6.—(A.H.W.) Pakiri, 15/12/46, 7-8 pairs, 1 nest, 3 eggs.—(R.B.S.) 2/1/47, 16 plus, 1 nest 3 eggs.—(H.R.McK.) 10/1/47, nest, 3 eggs at Waipu; 13/1/47, c. 26, Ruakaka, 1 nest, 3 eggs.—(D.A.U.) 22/6/47, 3 flew high inland from Pakiri.—(J.W.St.P., H.R.McK.) 7/4/47, Waikato Heads, 11 in flock.—(R.B.S., O.C., H.R.McK.) Waikato Heads, 27/10/47, nest, 3 eggs.—(E.G.T., R.B.S.) Recorded in autumn in Manukau, (a) Karaka, 1 on 1/1/47 and 10/1/47, 2 on 27/4/47 and 11/5/47.—(D.A.U., R.B.S.); (b) Puketutu Flats, 1 on 25/1/47.—(P.C.B.) Waitotara Estuary and Lagoon, one seen on 29/10/46, 8/1/47, and 21/2/47.—(W.P.M.) Table Hill, Stewart Is., 5/2/47, 12.—(W. Martin, D.N.F.C.)

WRYBILL PLOVER (*Anarhynchus frontalis*).—Parengarenga, 18/7/47, one.—(A.H.W.) Recorded from three localities in Manukau: (a) Karaka, first seen 9 on 2/2/47, maximum 74 on 30/3/47, 3 on 21/9/47. (D.A.U.); (b) Puketutu Flats, first seen 30 on 17/1/47; at midwinter the flock numbered 190-200; 10 on 5/10/47 (P.C.B.); (c) Puhinui, 1 on 12/2/47; looked as if it was heading for Karaka, 36 on 29/9/47 (R.B.S.) Miranda, Firth of Thames, 77 on 12/1/47, c. 230 on 2/2/47; no big flocks noted in winter, but tides were not favourable.—(R.B.S., H.R.McK.) Waitotara Beach Lagoon, 2 on 14/10/46, 4 on 15/10/46, 3 on 23/10/46, 10 on 1/10/47, 3 on 6/10/47, 12 on 10/10/47.—(W.P.M.) Wanganui Estuary, 20/1/47, two feeding, one with faint bar.—(J.M.M.) Waikanae Estuary, 20/8/47, single bird feeding with dotterel was not present previous week nor later.—(C.A.F.) Several pairs and odd birds observed on nesting areas of the Ashley River from late August throughout September, 1947.—(R.A.F.)

RED-CAPPED DOTTEREL (*Charadrius alexandrinus ruficapillus*).—Solitary female found on nest with two eggs, Ashley River, 5/8/47, by Mr. L. A. Shand; nest destroyed by floods and subsequent nest with further two eggs laid Aug. 23. This bird appeared to have no mate of her own species. L. A. Shand and K. Bigwood observed male banded dotterel take nest relief and brood eggs, which in appearance were normal eggs of the red-capped species. As eggs did not hatch in average period they were taken for examination; one was infertile and in the other a partly developed embryo had died. Nesting area subsequently again flooded.—(R.A.F.)

SPUR-WINGED PLOVER (*Lobibyx novaehollandiae*).—Kahautara, Wairarapa, 12/8/47, one bird reported; identification confirmed.—(R.H.D.S.)

KNOT (*Calidris canutus*).—Parengarenga, 12/5/47, c. 100; 14/7/47, 18; 18/7/47, 58; 20/7/47, 42, 3 in breeding plumage; 23/7/47, c. 300.—(A.H.W.) Clevedon, 4/3/47, 5 red birds, evidently on passage as knots are not normally found with regular godwit pack in estuary.—(H.R.McK.) Waipu, 10/1/47, three.—(D.A.U.) Miranda, Firth of Thames, 12/1/47, 4 had left flats and were feeding on pools behind beach.—(R.B.S.) Karaka, 6/7/47, 300 plus.—(R.B.S., O.C.) Waitotara, three with godwits during October, 1946; 1 only on 13/11/46; next seen was one on 10/10/47.—(W.P.M.)

SIBERIAN PECTORAL SANDPIPER (*Calidris acuminata*).—Near Waitukaruru, Firth of Thames, 19/10/47, five believed to be this species.—(W.P.M., H.R.McK.) 24/10/47, 13 in same wet field.—(R.B.S.)

AMERICAN PECTORAL SANDPIPER (*C. melanotos*).—Miranda, Firth of Thames, 1 on 3/11/46, 2 on 28/12/46, 7 on 12/1/47, 8 on 2/3/47 7 on 16/3/47 one of which may have been a Siberian, though certain identification of these two species in some plumage is very hard in field.—(D.A.U., P.C.B., H.R.McK., R.B.S.)

BAR-TAILED GODWIT (*Limosa lapponica*).—Parengarenga, 18/7/47 7; 1/8/47, 1; 15/8/47, c. 1000; the appearance of a flock of this size at this time of the year is most extraordinary. They were certainly not birds that had spent the winter here in Parengarenga Harbour, for at no time during the winter have I observed godwit in numbers even remotely approaching what I saw on this occasion. They appeared restless and unsettled, remaining for a day or two only. Until the arrival of the usual numbers quite recently (7/10/47) godwit were not seen again in more than twos and threes.—(A.H.W.) Ruakaka River, 29/9/46, flock of 9; one, separating when disturbed, flocked with an immature N.Z. dotterel; 8/3/47, several reports to Auckland Museum and Press of large flocks of some thousands flying northwards over western suburbs; 25/10/47, Manukau Marbour, near Mangere Aerodrome, c. 2000 in close flocks of 600-800 feeding at low water, including a number of dark-plumaged birds.—(E.G.T.) Clevedon: The summer flock increased to 1000 plus. The usual 60-70 pale birds were left in April. The last of these left at the end of May, presumably having gone to winter in Manukau.—(H.R.McK.) Waitotara Beach Lagoon, about 30 on first visit, 10/10/46, 12 staying till end of month; 5 on 13/11/46; last on 13/12/46, when shallow end of lagoon was almost dry; next seen were 16 on 1/10/47.—(W.P.M.)

CURLEW (*Numenius madagascariensis*).—Parengarenga, 12/7/47, one has been in vicinity for three years.—(A.H.W.) Waipu River mouth, 10/1/47, two with godwits and knots.—(D.A.U.)

WHIMBREL (*N. phaeopus*).—Clevedon River mouth, 6./4/47.—4/5/47, one.—(H.R.McK.) Possibly the same bird wintered at Karaka, where D.A.U. found it on 25/5/47. Between then and 15/9/47, it was seen on several occasions by numerous observers.—(R.B.S.) Three reported with godwits at Clark's Beach, Manukau, in February, 1939, by Mr. G. Moore.—(E.G.T.)

WHITE-HEADED STILT (*Himantopus himantopus*).—Parua Bay, Whangarei, Dec., 1946, pair nested.—(W.H.) Clevedon, 1946-47, several pairs nested successfully in district. 20/8/47, Mr. Alec Smith found nest with 1 egg; on 22/8/47, it had 3 eggs, and another nest of 3 eggs was found same day.—(H.R.McK.) Number of breeding pairs is increasing west coast of Firth of Thames; early nest had 4 eggs on 24/8/47. For seventh successive winter, almost black stilts frequented Miranda Creek. In Waikato stilt is spreading. In spring, 1947, for first time pair nested on Mr. G. S. A. Henderson's farm at Onewhero and had hatched three young before end of September. Colony of 4-5 pairs, Te Kohanga, Oct., 1947.—(R.B.S.) Two pairs breeding on ponds near Patumahoe, 22/10/47.—(E.G.T.) 23/9/47, 13 or 14 in swamp at Te Kaiti.—(W.F.I.H.) Napier, 2/7/47, two; Muriwai, Gisborne, 2/7/47 c. 100; Gisborne, 5/7/47,

c. 50; S. of Hastings, 5/7/47, four.—(G.G.) Waitotara Estuary and Lagoon, about 20 on 11/10/46, decreasing to 8 by 7/11/46, then increasing to maximum number seen, 87, on 21/2/47, decreasing again to 30 or 40 in the winter; two swamps two or three miles inland had colonies of ten in one, about 20 in the other, apparently nesting, in October, 1946. On 6/10/47 two nests each with 4 eggs, and another nest already hatched, found on sandhill between lagoon and beach. Also visit Wanganui tidal mudflats during winter.—(W.P.M.) Waikanae River mouth, 19/2/47, c. 40; 24/2/47, none; 2/3/47, 7.—(B.I.) Molesworth Station, Marlborough, mouth of Alma and Acheron rivers, 3/9/47, two, not there previous day; 31/8/47, six on Awatere River at Molesworth.—(M.M.C.) Heathcote River, near estuary, 15/9/47, two; west of Loburn, Canterbury, 10/12/45, many seen; N. end of Lake Ellesmere, 27/3/47, ten.—(G.G.) Albury Park Station, Te Ngawai River, 15/1/47, three pairs in mile of river bank; all aggressive; saw chick only once at distance. Washdyke Lagoon, 26/1/47, many; Lagoons, Blenheim, 20/5/47, heard; Timaru, 25/8/47, heard flying at night.—(R.V.McL.) Halkett, Canterbury, 28/10/46, pair seen on pond, nest marked by farmer in middle of paddock being cultivated was visited by teacher and observers 2/12/46; a shallow depression in soil among the clods, a few pieces dry grass and twigs, 4 eggs, six stilts barking on far side of paddock; 6/12/46, nest empty; same locality six stilts seen 15/9/47; another observer saw two 15/8/47 and 25/9/47; saw six on 4/10/47 and 6/10/47. Stewart's Gully, observer saw parties of stilts 25/8/47 and every day for ten days.—(H.S.G.) Washdyke Lagoon, Timaru, 9/10/46, 12.—(G.G.) Waitati, 11/6/47, eight feeding at dusk in stream near Waikouaiti, apparently stragglers.—(G.G.) Districts near Dunedin, Oct., 1946—April, 1947, small flocks, max. 12 and odd birds recorded; Maori Hill, Dunedin, 2/1/47, about 9 p.m. flock heard flying over.—(I.T.) Milton, 14/10/46, six.—(G.G.)

BLACK-FRONTED TERN (*Chlidonias albigularis*).—Near Thornton, Bay of Plenty, 15/5/47, four dipping over sodden paddocks.—(R.B.S.) Ohau, 5/1/47, two.—(J.M.C.) Tukituki-Ngaruroro outlets, 14/7/47, two immature.—(J.M.C., F.H.R.) Palliser Spit, 13/4/47, feeding offshore, max. 28 resting on spit; adults in winter plumage, nearly half of birds immature; 23/4/47, only one seen; 25/5/47, c. 45, including only five immature, 19 birds fully black caps, moult in general further advanced; 5/7/47, c. three; 27/9/47, none.—(J.M.C.) Halkett, Canterbury, follows ploughing in spring, parties fly to Waimakariri riverbed every evening; 14/10/46, parties up to twelve; 29/9/47, eight flying to night quarters on Waimakariri riverbed.—(R.V.McL.) Hurunui River, near Balmoral State Forest, 20/10/46, common, 5-6 birds at time feeding on river and river flats.—(K.W.)

CASPIAN TERN (*Hydroprogne caspia*).—In mid-May, 16 was biggest count on silica flats, Lake Rotorua.—(R.B.S.) Waiheke, 30/3/47, one juv. soliciting food from adults.—(P.A.S.S.) Waitotara Estuary and Lagoon, one or two seen on most visits at all times of the year; greatest number eight, on 28/7/47.—(W.P.M.) Tukituki-Ngaruroro outlets, five; Te Awanga Lagoon, 12, 14/7/47.—(F.H.R., J.M.C.) Turakina Mouth, 15/3/47, five.—(J.M.C.) Lyall Bay, 6/10/46, 2/11/46, one; Hutt River mouth, 19/1/47, two.—(H.L.S.) Halkett, Canterbury, 28/10/46, 12 seen about paddocks chasing, also 29/10/46, also seven on 31/10/46; 30

flying about ploughing, 18/9/47.—(H.S.G.) Washdyke Lagoon, 26/1/47, Raucous cries of pair overhead near colony of white-fronted terns; after watching some time saw one "gosling," creamy yellow with orange-red beak.—(R.V.McL.)

FAIRY TERN (*Sterna nereis*).—2/1/47, two at Mangawai Bridge; three feeding over fresh-water lakes, Te Arai Pt.; 3/1/47, one at Pakiri.—(H.R.McK.) Ruakaka, 12/1/47, two ad. and 1 juv.—(D.A.U.)

WHITE-FRONTED TERN (*Sterna striata*).—None seen at Castle-cliff in August, Sept. and Oct., 1946; nine seen on 19/11/46, and then present till June, 1947, but in less numbers than previous year, most seen being about 20. Not usually seen at Waitotara Beach, but on 23/4/47 about 150 on the lagoon, and 4/6/47, 35.—(W.P.M.) Palliser Spit, 17/11/46, nesting; c. 80 birds, 9 single egg nests.—(R.H.D.S., J.M.C.) 13/2/47, c. 2000, many juveniles.—(H.R.McK.) 13/4/47, c. 190 including only 2 or 3 immature, adults moulting breast feathers; 23/4/47, none; 25/5/47, c. 120; 5/7/47, c. 3; 27/9/47, none.—(J.M.C.) Castlepoint: Mr. W. F. Lenz counted 600 here in Feb., 1947. All left on night of 13th immediately preceding severe southerly gale; only beginning to return in April. I saw three on April 5, nine on 6th, and on 7th the number increased during morning from 25 to 40 odd. Tukituki-Ngaruroro outlets, 14/7/47, c. 12; odd birds carrying fish but not seen presenting to mates.—(F.H.R., J.M.C.) Turakina Mouth, 15/3/47, c. 35.—(J.M.C.) Waikanae River mouth, 17/2/47, one; 19/2/47, c. 700 (low tide); 22, 24 and 25/2/47, few.—(B.I.) Tongue Point, 6/4/47, 25 including young; abundant about this shore from Nov., 1946; size of winter population unknown.—(H.L.S.) Aramoana (Spit Beach) opp. Otago Heads, 12/1/47, several in nesting colony on broken mole, young were half-grown and able to fly; Washdyke Lagoon, 26/1/47, colony near mouth of lagoon on shingle beach between lagoon and sea sloping to north. Some adults still sitting, some young just hatching, many chicks moving about; adults were constantly flying to and from ocean bringing in small silvery fish.—(R.V.McL.) Wickliffe Bay, Otago Pen., flock of c. 100, many young.—(Miss E. Sutherland, D.N.F.C.) Westland: 250-300 on Hokitika River bar at low tide, April, 1947.—(B.D.B.)

BLACK-BACKED GULL (*Larus dominicanus*).—Waitotara, 14/10/46, preparing nests; 6/11/46, nests with up to 3 eggs; 13/12/46, hatching; 6/10/47, preparing nests again.—(W.P.M.) Waikanae River mouth, 19/2/47, c. 700; 22/2/47, c. 200; 24 and 25/2/47, about same number.—(B.I.) Monck's Bay, Sumner, 15/10/45, about 100 noisily disporting themselves in air and water, apparently sexual activity.—(G.G.) Aramoana (Spit Beach, opp. Otago Heads), 12/1/47, sitting on nests on cliffs above beach.—(R.V.McL.) Company Bay, Otago Har., 10/1/47, four dropping pieces of stale bread apparently in endeavour to break it like cockles.—(Mrs. G. F. Nicholls, D.N.F.C.) Westland: 150-200 on Hokitika Beach and shingle banks exposed in Hokitika River at low tide, April, 1947.—(B.D.B.)

RED-BILLED GULL (*L. novaehollandiae*).—Port Fitzroy, Great Barrier, 26/12/44, one with ring on leg perched on yacht reported by F. G. Fish.—(E.G.T.) Waikanae River mouth, 19/2/47, c. 700; 22 and 24/2/47, much smaller number.—(B.I.) Petone, 12/10/47, flock on beach were constantly picking up twigs and carrying them, as if with

some courting significance; same behaviour seen Rotorua in September, 1946.—(C.A.F.) Te Awaiti, East Coast, Wairarapa, 28-9/12/46, colony reported on last year (Vol. 2, No. 1) had 125 empty nests, 7 with one egg, 20 with two and 1 with three, total of 153 nests and 50 eggs. Again, all empty nests may not have been intended for laying in; 11 sucked eggs were found and harrier was seen to fly to island and suck eggs in nest; no notice was taken of gulls swirling around it.—(J.M.C., A.S.W., R.H.D.S.) Castlepoint, 5-6-7/4/47, number varied from 50 to c. 84; noted eating house flies on decaying refuse on beach.—(J.M.C.) Scarborough, Sumner, 21/10/45, sitting on nests without eggs.—(G.G.) Long Beach, Otago, 7/2/47, flock of c. 500; c. 50 at time bathing in small stream, all birds coming in from sea bathing before joining those on beach. Otago Harb. mole, 12/2/47, well over 100.—(I.T.) Riverton Beach, 22/4/47, many, adult and juvenile; Bluff, 12/4/47, present.—(G.G.)

BLACK-BILLED GULL (*L. bulleri*).—Miranda, Firth of Thames, 2. had returned on 16/3/47, earliest date so far; mid-winter maximum c. 600, big increase over previous years; only 4 seen 24/10/47.—(H.R.McK., R.B.S.) Rotorua, c. 30 on 12/5/47; Rotomahana, 10 plus on 16/5/47.—(R.B.S.) Rotorua, near Ward Baths, 15/1/47, large flotilla of grown chicks of this and *L. novaehollandiae*. Chicks exceeded 100 and among adults black-billed more plentiful than red-billed.—(C.A.F.) Lake Taupo, 6/12/46, c. 6 adults seen.—(J.M.C.) Tukituki-Ngaruroro outlets, 14/7/47, c. 6—(J.M.C., F.H.R.) Manawatu Mouth, 4/1/47, three.—(J.M.C., R.H.D.S.) Wanganui Estuary, 31/8/47; one, harried by other gulls.—(J.M.M.) Castlecliff mole, 17/2/47, two; Waitotara Beach Lagoon, from 2 to 4 seen various visits from 5/3/47 to 17/9/47; none seen on three visits since.—(W.P.M.) Hutt River Estuary, 19/1/47, one.—(H.L.S.) Petone, 12/10/47, one immature with flock of red-billed.—(C.A.F.) Hal-kett, Canterbury, Sept., 1947, few seen daily flying from paddocks towards Waimakariri River night quarters; feed in paddocks.—(H.S.G.) Hurunui River, near Balmoral State Forest, 20/10/46, common throughout; groups of 2-3 birds feeding and flying along river and paddocks. Nesting colony in two sub-colonies of about 500 birds. Three birds on Clutha River, at Cromwell, 22/2/47.—(K.W.) Bluff, 12/4/47, present.—(G.G.) Westland: About 100 on shingle banks exposed in Hokitika River at low tide, April, 1947.—(B.D.B.)

ARCTIC SKUA (*Stercorarius parasiticus*).—Rangitoto Channel to Rakino, 30/11/46, 11 passed at intervals.—(M.E.J., J.M.C., R.B.S.) Clevedon to Waiheke, first of season seen on 16/11/46. Up to 21 on one week-end trip; four on 4/5/47. One day when white-fronted terns were very scarce they were chasing black-backed gulls. Three skuas forced black-backed gull to drop piece of bacon rind.—(T.M.R.) Reported as still off Canterbury coast in early May. One (pale-breasted form) seen chasing tern, Waikuku, 9/5/47.—(R.A.F.)

POMARINE SKUA (*S. pomarinus*).—Clevedon, 24/11/46. One thought to be of this species owing to its large size and fact that it took food thrown from launch as species commonly does in Australian waters. "I have not known the Arctic skua to do this." It had no projecting tail feathers.—(T.M.R.)

SKUA (? spp.).—Palliser Spit, 13/2/47, five.—(H.R.McK.)

SOUTHERN SKUA (*Catharacta skua lonnbergi*).—One caught in hawk trap at Awhitu late August, 1946 and reported by B. S. Irwin. —(R.B.S.)

PIGEON (*Hemiphaga novaeseelandiae*).—Waipu Range. Over 16 years ago great flight came from direction of Hen and Chicken Islands. They were so thin and weak that many fell and died. Some were picked up and examined.—(G.K.McK.) Parua Bay, 15/3/47, 2 eating cabbage tree berries.—(M.H.) Wangaehu, Wairarapa, 16/8/47, one seen by Mr. L. Robinson eating leaves of flowering plum (*prunus*), tree practically stripped.—(J.M.C.) Catchpole's Creek, Wainui-o-mata, 2/2/47, two; Wainui-o-mata, 23/3/47, two very tame.—(D.H.G.) Mt. Blohard Bush, Oxford, 10/12/45, several.—(G.G.) Reservoir Reserve, Dunedin, 11/6/47, 12-15 reported seen; Dunedin, 26/8/46, tui teasing pigeon, which flapped its wings on approach of tui but refused to fly.—(I.T.) High St., Dunedin, pigeon sitting in tree close to thoroughfare, took no notice of passing people, trams and motor cycles.—(Miss Farquharson, D.N.F.C.) Dunedin, 21/4/47, pigeon sat unconcernedly in tree, Arthur Street School grounds while game of hockey played nearby.—(D.N.F.C.) Near Franz Josef Glacier, March, 1947, 30 to 40 feeding on laurel berries.—(Mrs. Ancell, D.N.F.C.) Bush reserve near Winton, 19/4/47, five.—(G.G.) Westland: Five at Lake Kaniere, 6/4/47; 3 at Hokitika River Gorge, 7/4/47; 2 at Mount Misery, 10/4/47; 8 seen from road between Weheka and Paringa River, 29/4/47; 2 at Weheka, 30/4/47.—(B.D.B.) Kaipipi Road, Stewart Is., 9/2/47, 18 in single tree feeding on fuchsia.—(W. Martin, D.N.F.C.)

ROCK PIGEON (*Columba livia*).—Rough survey of parts of coasts of Banks Peninsula, mid-Sept., 1947, showed many thousands to be permanently nesting.—(R.A.F.) Otago Central, 22-23/2/47, common amongst rocks and nesting under many bridges of almost any size. Weka Pass, Canterbury, 20/10/46, reported nesting in rocks.—(K.W.) Styx, C. Otago, 28/12/46, 27 feeding on stack; small numbers on other stacks.—(I.T.)

KAKAPO (*Strigops habroptilus*).—Lake Manapouri, Otago, Dec., 1946, tracks reported by launchman as numerous higher up mountains; when tracks destroyed they are quickly repaired, showing that birds present and active.—(W.M.B.)

KAKA (*Nestor meridionalis*).—Moumoukai, Clevedon, 20/1/47, Mr. Fred Gibbons saw juvenile near Mt. London; no change in numbers noted. (J.W.St.P.) Seen daily at Minginui.—(R.St.P.) Lillburn Bush, Southland, 17/2/47, 2-3 heard and one seen.—(K.W.)

KEA (*N. notabilis*).—Eglinton Valley, Otago, Dec., 1946, 3 seen, others heard.—(W.M.B.) Westland. Two seen at dawn at Franz Josef Hotel, 2/4/47.—(B.D.B.)

RED-FRONTED PARRAKEET (*Cyanorhamphus novaeseelandiae*).—Mr. J. F. Douglas reported single bird seen in Upper Hutt, spring, 1947. —(C.A.F.) Ulva, Stewart Is., 12/2/47, present.—(W. Martin, D.N.F.C.)

YELLOW-FRONTED PARRAKEET (*C. auriceps*).—Minginui, 2-5 seen daily.—(R.St.P.) Mt. Aspiring Station, 12/3/47, reported all parakeets identified that area this species.—(I.T.) Ulva, Stewart Is., 12/2/47, present.—(W. Martin, D.N.F.C.)

PARRAKEET (*Cyanorhamphus* spp.).—Calls heard at Parua Bay.—(M.H.) Eglinton Valley, Otago, Dec., 1946, in pairs on several occasions; Lower Hollyford Valley, groups up to 12.—(W.M.B.)

ROSELLA (*Platycerus eximius*).—Dunedin area, 9/11/46, reported to be increasing, 15 seen at one time; 1/10/46, feeding on barberries.—(I.T.) Dunstan Creek, St. Bathans, C. Otago, 5/4/47, one.—(Mrs. P. L. Moore, D.N.F.C.)

SHINING CUCKOO (*Chalcites lucidus*).—Moumoukai, Clevedon, first heard on 2/9/46.—(J.W.St.P.) Clevedon, late songs, heard frequently up to end of Jan.; three times in Feb., also on March 4, 9, 10, 26, and 29.—(Mrs. G. K. McKenzie and Miss A. T. Goodwin.) Remuera, 5/6/47, Mr. A. R. Browne heard one sing the full song twice, adding the downward notes at the end each time. It was a calm sunny day in the midst of bad weather.—(H.R.McK.) Parua Bay, first heard 15/10/46; last heard third week in Jan.—(M.H.) Te Kuiti, 8/3/47, 2 juv. being fed by warbler.—(W.F.I.H.) South Karori, 2/1/47, four in mile, and except in one instance confined to remnants of dying scrub. Full and part songs heard. Wellington Botanical Gardens, 17/1/47, part song and slur notes. Karori, 1/2/47, a young bird being fed by single warbler. A soft "tsip" from cuckoo indicated its position to warbler.—(H.L.S.) Song heard Karori, 22/10/47.—(M.A.F.) Clifton, Sumner, 23/10/45, one.—(G.G.) Dunedin, 26/9/46, first heard this season.—(Miss Roberts, D.N.F.C.)

LONG-TAILED CUCKOO (*Eudynamis taitensis*).—Clevedon, Oct. 15, 1946, 9.15 p.m., stationary calls; 16/10/46 and 2/11/46, calls moving southwards; 11, 12, 13/1/47, calls in Ness Valley each evening; 28/2/47, calls at Clevedon.—(H.R.McK.) Moumoukai, 1/3/47, two parties of 3 and 2; unusual here.—(G.C.M., J.W.St.P.) Minginui, first heard, 2/11/46, calling at 9 p.m. and flying south.—(R.St.P.) Farewell Spit, Nelson, first heard last season 2/11/46 in evening.—(P.E.W.) One adult found dead, Burke's Pass, early in November, 1946, and another at Hawarden on November 21.—(R.A.F.) Hilderthorpe, Otago, 22/1/47, one seen.—(C.W.McL.) Rakiahua, Stewart Is., 7/2/47, six seen at once.—(W. Martin, D.N.F.C.)

MOREPORK (*Ninox novaeseelandiae*).—Minginui, 5/7/47, morepork and bat chasing insects in competition; morepork also chasing moths at electric lights of timbermill.—(R.St.P.) Dunedin: Calls reported on 15 occasions, 7/9/46—11/5/47.—(I.T., Mrs. J. Hickman and Mr. W. Davidson, D.N.F.C.)

LITTLE OWL (*Athene noctua*).—Pebble Hill State Forest, 15/2/47, single bird, reported numerous. Central Otago, 22/2/47, reported numerous throughout fruit district.—(K.W.) Dunedin, recorded on 23 occasions from 4/6/46—16/5/47.—(I.T.) Westland: One heard at night at Franz Josef Hotel, 1/5/47.—(B.D.B.)

KINGFISHER (*Halcyon sanctus*).—Napier-Gisborne-Ruatoria, 2/7/47, seen right through.—(G.G.) Karori, 15/9/47, arriving in garden at dusk.—(H.L.S.) Catchpole's Creek, Wainui-o-mata, three, 2/2/47.—(D.H.G.) Clifton, Sumner, 11/8/45, several; Waitati, 11/6/47, three.—(G.G.) Hilderthorpe, Otago, one in garden, 1/2/47.—(C.W.McL.) Dunedin, 12/6/46—18/4/47, ten records.—(I.T.)

KOOKABURRA (*Dacelo novaeguineae*).—Wayby, near Wellsford, 16/11/46, part-call heard, full call had been heard recently by residents. —(H.R.McK.) Reliably reported at Punakaiki, single specimen, winter, 1947.—(R.A.F.)

AUSTRALIAN BARN OWL (*Tyto alba*).—Stray specimen, adult female, shot at Barrytown, Westland, 16/8/47.—(R.A.F.)

RIFLEMAN (*Acanthisitta chloris*).—Pair seen, Poro-o-tarao.—(W.F.I.H.) Common, Minginui.—(R.St.P.) Ngaumu Gorge, Masterton, 20/3/47, still numerous in small patches beech, and also in nearby manuka scrub.—(J.M.C.) Pohangina Valley, Domain, 3/5/47, several.—(J.H.C.) Mt. Blohard Bush, Oxford, 10/12/45, one.—(G.G.) Dunedin, 12/6/46—16/3/47, six occurrences bush areas.—(I.T. and D.N.F.C.) Maori Hill, 11/11/46, pair hatched young in nest amid heap of stones in garden.—(Mrs. P. L. Moore, D.N.F.C.)

PIPIT (*Anthus novaeseelandiae*).—Awarua Plains, Southland, Feb. 15, 1947, numerous though local, flocks up to 12 birds.—(K.W.) North of Taieri Plain, 11/5/47, c. 20.—(Mrs. J. Hickman, D.N.F.C.)

FERN BIRD (*Bowdleria punctata*).—Clevedon, 1946, one seen.—(C.M.R.) Takatu, Rodney, 15/12/46, two heard in swamp at Day's Bay. Te Arai lakes, reported plentiful all around lakesides.—(H.R.McK.) Present at Parua Bay.—(M.H.) Plentiful in patches, volcanic plateau.—(R.St.P.) Single pair located in small swamp near Ngutuweru, Waitotara, Feb., 1947.—(C.A.F.) Wanganui, 1947, numbers present in one large swamp.—(J.M.M.) Quartz Ranges, Upper Aorere River, Collingwood, 24/12/46, one, apparently young, bird seen.—(C.L.) Waituna Lagoon, Southland, 15/2/47, two in rushes.—(K.W.) Rakiapura, Stewart Is., 7/2/47, still plentiful.—(W. Martin, D.N.F.C.)

GREY WARBLER (*Pseudogerygone igata*).—Young bird seen to fly feebly out from bamboo thicket; it was forcibly turned round in air by one of parents and guided back to thicket.—(F.M., H.R.McK.) Mangere, 9/9/47, seen gathering carpet fluff for nest.—(R.B.S.) Parua Bay, 9/11/46, two young following parent for food.—(M.H.) Wanganui, in garden almost every day throughout winter of 1947, a definite increase.—(W.P.M.) Baring Head, 24/2/43, a group of four birds, one of which sang weakly, was seen in low scrub near lighthouse; they disappeared after rising in loose flock; weather calm and sunny but service duties made it impossible to establish direction taken.—(H.L.S.) Halkett, Canterbury, usually heard singing in schoolground annually winter and spring; little singing heard from 1/10/47 to 7/10/47.—(H.S.G.) Hildershorpe, Otago, heard and seen all year, 12 or more here 2/8/46, full song.—(C.W.McL.) Westland: Common all bush areas, April, 1947.—(B.D.B.)

YELLOW-BREASTED TIT (*Petroica macrocephala macrocephala*).—Dunedin, 3/9/46—18/5/47, recorded 11 localities, two in gardens.—(I.T. and Mrs. P. L. Moore, D.N.F.C.) Bush reserve, near Winton, 19/4/47, three males and two females.—(G.G.) Hildershorpe, Otago, 16/1/46, one.—(C.W.McL.) Eglinton Valley, Dec., 1946, one of each sex. (W.M.B.) Westland: Four pair and 2 single males at Lake Kaniere, 6/4/47; 2 males at Hokitika River Gorge, 7/4/47; 3 pairs and 1 male at Lake Mahinapua, 26/4/47; 2 single males, Lake Kaniere, 27/4/47; about 30 (male and female) were seen from road between Hokitika and Paringa

River, 28 and 29/4/47; three males and 1 female at Lunch Hut, on track to Fox Glacier, 30/4/47; 3 males in bush at Waiho, 1/5/47; 2 males on track down cliff to Franz Josef Glacier, 2/5/47.—(B.D.B.)

PIED TIT (*P. m. toitoi*).—Moumoukai, 18/1/47, young with yellow at gape being fed out of nest by parents; 24/4/47, pied tit and bellbird apparently trying to imitate one another.—(J.W.St.P.) Minginui, 14/10/46, young bird being fed by male.—(R.St.P.) Pohangina Valley Domain, caretaker said that in 12 years he had not seen this bird.—(J.M.C.) Catchpole's Creek, Wainui-o-mata, 2/2/47, pair, very tame.—(D.H.G.)

ROBIN (*Miro australis*).—Poru-o-tarao, several pairs noted, spring, 1947.—(W.F.I.H.) Minginui, seen eating white ants from rotten wood. Singing well in Aug.; 11/11/46, 2 full-grown young being fed by one parent.—(R.St.P.) Eglinton Valley, Otago, Dec., 1946; five seen.—(W.M.B.)

FANTAIL (*Rhipidura fuliginosa*).—Black mated with pied near Manawatu River, 21/8/47.—(C.A.F.) Botanical Gardens, Wellington, 8/7/46, a black bird; South Karori, 23/2/47, brood of three recently fledged with two black; 8/6/47, 2 black birds reported from same spot; 15/9/47, one black bird reported; 24/6/47, a pied and black bird together a few hundred yards from centre of Wellington city.—(H.L.S.) Wainui-o-mata, Lower Hutt, 23/3/47, four in bush, very tame, came to my whistle.—(D.H.G.) Day's Bay, Wellington, black one in garden.—(A.A.B.) Clifton, Sumner, 1/7/45 and 11/8/45, two.—(G.G.) Hilderthorpe, Otago, 23/3/46, one; 5/10/46, one; Willowbridge, 4/5/46, a pair; 8/1/47 and 11/1/47, one; black one in garden, 24, 25/3/47.—(C.W.McL.) Dunedin, 1/6/46—31/5/47, count from garden 30 Stonelaw Terrace, 144 (pied 122, black 22), count outside garden for year 149 (pied 113, black 36).—(I.T.) Westland: Common in all bush areas, April, 1947.—(B.D.B.)

YELLOWHEAD (*Mohoua ochrocephala ochrocephala*).—Dunedin, 29/6/46—1/1/47, three reports of occurrences.—(I.T., Mrs. P. L. Moore, D.N.F.C.) Eglinton Valley, Otago, Dec. 1946, few seen, in groups of 2—4.—(W.M.B.)

WHITEHEAD (*M. o. albicilla*).—Poru-o-tarao, 25/8/47, mostly in flocks of 6—8 birds.—(W.F.I.H.) Minginui, common.—(R.St.P.) Matahiwi, Wanganui, 13/9/47, flocks 5-12, not uncommon throughout year in most lower bush areas.—(J.M.M.) Pohangina Valley Domain, 4/5/47, several.—(R.H.D.S.)

BROWN CREEPER (*Finschia novaeseelandiae*).—L'Aube Hill, Akaroa, 27/3/47, three.—(G.G.) Dunedin, 16/6/46-11/10/46, heard every month; 1/1/47-27/5/47, records every month. Purakanui, 9/2/47, 15 counted in one place, recorded 8 localities.—(I.T.) Bush reserve near Winton, 19/4/47, six.—(G.G.)

WHITE-EYE (*Zosterops lateralis*).—Opua, Bay of Islands, Feb. and March, 1945, feeding on Jerusalem cherry berries, said to be poisonous.—(M.A.E.D.) Clevedon, 13/11/46, nest with two well incubated eggs, 2 chicks on Nov. 23 which left about Dec. 3.—(F.M.) Moumoukai: Even more scarce than last year; first flocks noted were of 20 and 15 on 8/1/47.—(J.W.St.P.) Parua Bay, 17/6/47, 1 singing in flock feeding among gorse.—(M.H.) Minginui: Ravenously hungry at end of winter; 6/9/47,

65 counted on a stale loaf.—(R.St.P.) Wanganui: Flocks visiting garden in 1947 both smaller and later in arriving than in previous two years.—(W.P.M.) Generally less plentiful in Canterbury, autumn and winter, 1947, although large flocks frequented more sheltered localities. Reduced numbers may be correlated with excessive rain during previous nesting season.—(R.A.F.) Kirwee, near Halkett, 27/10/46, recorded; none came to bird table, Halkett, winter of 1947; not many seen; no snow.—(R.V.McL.) Halkett, Canterbury, most seen 1947 c. 30; dates recorded, 21/2/47, 21/3/47, 9/5/47, 20/6/47, 15, 16, 18, 22, 23, 24/7/47, 8, 11, 13, 15/8/47, 9, 15/9/47, pair seen 6/10/47. Flocks seen June, July, August, 1946; no flocks reported 1947.—(H.S.G.) Dunedin: Flocks in garden ranged from 20-30 beginning of June, 40-50 beginning of July, 1946, then about 30 on average until decreased to 12 at end of Sept. They were late returning to bird table in 1947, but on morning of June 20, they suddenly appeared at bird table in numbers up to 24. Previous to that they had been seen at times in considerable numbers among trees about garden; fine weather broke after their appearance with some snow on hills. Near Kaikorai Stream mouth, 17/5/47, very large numbers birds feeding on ripe berries of *Loranthus micranthus*.—(I.T.) Hilderthorpe, Otago, 23/10/46, plentiful from May to Sept. 1946; flock of 200-300; two nested, 1945, two broods 3 and 2. First arrivals for season heard and seen at 8.30 a.m. on 31/3/47; reported in Oamaru two days earlier; flock here increased to over 20 by 21/4/47; at least 12 feeding at table at 10.45 a.m. on 21/4/47; no early flock seen to pass on.—(C.W.McL.) Westland: About 12 at Lunch Hut on track to Fox Glacier, 30/4/47; about 12 at Franz Josef Hotel, 2/5/47.—(B.D.B.)

TUI (*Prosthemadera novaeseelandiae*).—Moumoukai, Clevedon, 17/1/47, Mr. Fred Gibbons found a nest on roadside, two chicks were in nest and one on the ground, which he put back into nest. Later in day he found nest empty and feathers all around. The two parents were trying to drive off a hawk which had apparently got the chicks. On 9/12/46, on Mt. London track, young tuis with white feathers on their throats were learning to sing.—(J.W.St.P.) Arran Bay, Waiheke, numerous in spring.—(P.A.A.S.) Parua Bay, Whangarei, up to 100 some years in Sept.—(M.H.) Minginui, one seen chasing kingfisher.—(R.St.P.) Te Wae Wae Bay, 17/2/47, about 15 birds counted on walk of mile along beach.—(K.W.) Dunedin, 28/8/46, 15 in garden, largest number ever recorded; 6/10/46, feeding on tree salvia and puriri; 9/10/46, reported seen this season in garden at Waianakaroa, where not seen for many years.—(I.T.) Invercargill, 20/4/47, seen in gardens, come from bush for winter.—(G.G.) Westland: One at Hokitika River Gorge, 7/4/47; 1 at Lake Mahinapua, 26/4/47.—(B.D.B.)

BELLBIRD (*Anthornis melanura*).—Clevedon: Seen and heard throughout the year in Moumoukai, Otau, Mangatangi River area. Most plentiful about summit of Kohukohunui, where it sometimes outnumbers the tui. It was unknown here before 1942. At Kohukohunui, 17/12/46, wonderful chorus of bellbird, tui and blue-wattled crow; 6/1/47, no chorus.—(J.W.St.P.) Wanganui: Winter, 1946, visited wattles in garden till end of July; next heard calling in vicinity 21/3/47 and occasionally from then on till 19/7/47, but less frequently than previous year.—(W.P.M.) Pohangina Valley-Doman (Totara Reserve), 3/5/47, numer-

ous.—(J.M.C., R.H.D.S., R.A.D.) Kaitoke, 10/1/47, present among blossoming rata; Day's Bay, 7/2/47, one.—(H.L.S.) Mt. Blohard Bush, Oxford, 10/12/45, four; Clifton, Sumner, 24/6/45-16/8/45, one heard occasionally.—(G.G.) Dunedin, about garden in usual numbers during past year.—(I.T.) Winton, 11/4/47, five or six singing in bluegums in main street at daylight.—(G.G.) Westland, common in all bush areas, April, 1947.—(B.D.B.)

BLUE-WATTLED CROW (*Calleas cinerea wilsoni*).—Moumoukai: Seen and heard frequently throughout year except in moulting season, when they are very quiet; commonest about summit of Kohukohunui (Mt. Loudon), 2256ft; 13/1/47, on ridge leading to summit youngster observed at 12ft. being fed by one parent which pulled leaves of toro, raukawa and mahoe, held them in one foot and stripped off soft parts with its beak; soft parts were chewed and then fed to young one.—(J.W.St.P.) Ness Valley, Clevedon, 7/4/47, three ladies saw party of about 8 fly across creek in close formation into heavy bush. They had apparently been feeding on mossy bank. Opotiki, winter, 1945, Mr Lee saw one in bush south of reserve, four miles from Opotiki. Waitawheta, Waihi, 1941, Mr. Lee saw one bird.—(H.R.MeK.)

GREENFINCH (*Chloris chloris*).—Karori, 14/6/47, 300 in plantation.—(H.L.S.) Hilderthorpe, Otago, 10/9/46, flock 100-150; 26/9/46, many found dead after heavy rain, plentiful.—(C.W.MeL.)

CHAFFINCH (*Fringilla coelebs*).—Dunedin, first full song heard 18/8/47.—(L.G.) Styx, C. Otago, 25/11/46-3/12/46, common.—(I.T.)

REDPOLL (*Carduelis cabaret*).—Moumoukai, Clevedon, 22/8/46, flock of c. 30; 2/4/47, c. 15.—(J.W.St.P.) Minginui, huge flock of redpolls with some goldfinches, c. 3500, 17/5/47.—(R.St.P.) Flocks reported at Tutamoe, N. Auckland by Mrs. E. H. Matwig.—(E.G.T.) Dunedin, Oct. and Nov., 1946, calls and flights almost daily over garden, up to six seen on lawns, rest of year almost absent, common about pasture land near Reservoir Reserve.—(I.T.) Hilderthorpe, Otago, 2/9/46, 48 on electric wire, c. 150-200, feeding on cress.—(C.W.MeL.) Westland: Groups of 4 to 12 seen daily in open country, April, 1947.—(B.D.B.)

GOLDFINCH (*C. carduelis*).—S. of Ruatoria, 4/7/47, several large flocks, one of c. 1000 near Whangara.—(G.G.) Hilderthorpe, Otago, 17/8/46, count 65, c 100; 21/9/46, flock 150-200; 26/9/46, many found dead after heavy rains; plentiful.—(C.W.MeL.)

YELLOW HAMMER (*Emberiza citrinella*).—Clevedon, nest 4 eggs in low growth of blackberry, fern and grass, hatched about 22/1/47.—(F.M., H.R.MeK.) Styx, C. Otago, 25/11/46-3/12/46, in small numbers.—(I.T.)

HOUSE SPARROW (*Passer domesticus*).—Frenchman's Cap, off Waiheke, 8/3/47, c. 45 settling in for the night.—(A.A.S.) Hilderthorpe, Otago, 22/10/46, very plentiful, one pure albino 2/9/45 to 14/10/45.—(C.W.MeL.)

THRUSH (*Turdus ericetorum*).—Full territory song heard Christchurch from May 13, 7.30 every morning for about two weeks; resumed again more consistently early August.—(R.A.F.) Hilderthorpe, Otago, 22/10/46, plentiful c. 30 resident here; nesting and young birds now about.—(C.W.MeL.)

BLACKBIRD (*T. merula*).—Karori, 22/5/47, feeding on seeds of *Phormium tenax*. On 10/10/47, change in garden population occurred similar to that discussed in N.Z. Bird Notes Vol. 2, No. 6; a brood disappeared from unknown causes; two pairs seen fighting included marked male, one of original occupants; by 18/10/47 a nest was partly constructed 10 yards from other and banded bird was absent.—(H.L.S.) Morning song begun definitely, Christchurch, 19/8/47.—(R.A.F.) Summer, 22/8/45, in pairs with nesting material; 30/6/46, three males skirmishing in air, flying from tree to tree but not making contact, apparently a preliminary to mating.—(G.G.) Hilderthorpe, Otago, 22/10/46, plentiful; 12-20 resident; nesting.—(C.W.McL.) Dunedin, first full song, 11/7/47; first signs of nesting, 10/9/47.—(L.G.) Westland: Common, bush and open country, April, 1947.—(B.D.B.)

HEDGE SPARROW (*Prunella modularis*).—Dunedin, 21/4/47, singing short burst of full song, heard in two different localities on same day.—(L.G.) Clyde district, Central Otago, 22-23/2/47, common throughout, especially amongst rocks and shrubs.—(K.W.)

SKYLARK (*Alauda arvensis*).—Westland, common in open country, April, 1947.—(B.D.B.)

STARLING (*Sturnus vulgaris*).—Clevedon, 4/10/46, a pure white juv. newly dead was found. Martinborough, 15/2/47, Mr. Kinsella reported 100 plus killed by a storm.—(H.R.McK.) Napier-Gisborne-Ruatoria (see myna).—(G.G.) Castlepoint, 7/4/47, regularly seen eating tau-pata (*Coprosma retusa*) berries as they turned orange. Desert Road, Waiouru, 6/12/46, nesting in clay banks at highest point.—(J.M.C.) Halkett, Canterbury, 7/10/47, three nests under observation, school coal shed.—(H.S.G.) Hilderthorpe, Otago, 17/4/46, c. 200 in flock, roost 1 mile away; 23/10/46, c. 30, some nesting; as many as 6 at a time sipping nectar from flax flowers, 5-7/2/47.—(C.W.McL.) Westland: Common in open country.—(B.D.B.)

MYNA (*Acroderes tristis*).—Totangi, Gisborne, common, was present 1908.—(P.A.S.S.) Napier-Gisborne-Ruatoria, 2/7/47, starlings appear to be chased out as mynas spread; mynas were plentiful up to Gisborne but no starlings were seen. North of Gisborne starlings appear again, two flocks being seen and only an occasional myna. Waitara, 20/9/46, plentiful.—(G.G.)

WHITE-BACKED MAGPIE (*Gymnorhina hypoleuca*).—Totangi, Gisborne, Sept., 1947, c. 50 on a farm where in 1908 there were c. 12.—(P.A.S.S.) One visited Karaka in July, 1947.—(D.A.U.) Napier-Gisborne-Ruatoria, 2/7/47, seen right through.—(G.G.) Saddle Road, Woodville, 4/5/47, flock 22.—(J.M.C., R.H.D.S., R.A.D.) Eketahuna, 22/7/47, one seen lacking black tip to tail, which was entirely white with exception of narrow black edge.—(J.M.C.) Balmoral State Forest, N. Canterbury, 20/10/46, 15 counted on 6-7 miles, mostly in pairs; on Hurunui River flats up to 100 birds on one paddock including flock over thirty birds strong; reported beneficial to plantations.—(K.W.) Diamond Harb., Lyttelton, 3/12/45, bird with nest on top of bluegum swooped down several times endeavouring to drive people away from picnic underneath tree.—(G.G.) Hilderthorpe, Otago, 22/10/46, becoming more numerous.—(C.W.McL.) Dunedin, 25/2/47, Maori Hill, one on lawn, only one seen in Dunedin in past year.—(I.T.)

BLACK-BACKED MAGPIE (*G. tibicen*).—Whanawhana, 25 miles west of Hastings, 3/12/46, six; 8/1/47, three, first record of occurrence of this species in North Island; large numbers of white-backed magpies in district.—(L.W.McL.) Mt. Campbell, Napier (near Ngaroto School), 13/7/47, at least 21 seen in small area, where no white-backs were seen. On main road, near Takapau, 18/7/47, majority of flock of 17 were this species; four, including 1 immature north of Norsewood, and 6, including 2 immature, north of Dannevirke; 2 more, 1 immature, c. 8 miles north of Woodville. Adult male and female and immature of both species appear to be readily distinguishable with field glasses, and band of black, width of which varies considerably, is very prominent.—(J.M.C.) Windemere, S. Canterbury, 22/1/46, one adult seen.—(J.M.C., E.O.W.) Kaikoura golf links, 9/8/47, one seen.—(L.W.McC.)

ROOK (*Corvus frugilegus*).—Darfield, 7/9/47, plantation, 2 on bluegum tree.—(H.S.G.)

REVIEWS.

Birds of the Philippines, by Jean Delacour and Ernst Mayr (The Macmillan Company, New York): Pp. I-XI. and 1-309, 1946. \$3.75

This newest addition to the important series of publications "The Pacific World" should be of interest to New Zealand ornithologists. After Mayr's "Birds of the South-west Pacific" it is another important contribution to our knowledge of birds of the Pacific shores. Jean Delacour and Ernst Mayr who are the joint authors of this admirably set-up book, are well-known to ornithologists of this country and are both particularly qualified for the preparation of the book. The geography and habitats of the Philippine birds are dealt with briefly and followed by a systematic section and an appendix of birds of the Palawan group. The book is illustrated with excellent drawings by E. L. Poole and Alexander Seidel. Although the Philippines belong to the Oriental region, they are at the crossroads with regard to interesting elements of Palearctic, Malaysian, Moluccan and even Papuan-Australian origin. It will be also of interest to find that amongst the 450 species of Philippine birds there are several species belonging to the New Zealand list such as the reef heron (*Egretta sacra*), stilt (*Himantopus leucocephalus*), pipit (*Anthus novaeseelandiae*) and several others.—(K.A.W.)

"Native Animals of New Zealand," by A. W. B. Powell, Auckland Museum Handbook of Zoology.. Unity Press, Auckland, 1947. (96 pp. 411figs).

Here is an introduction to the fauna of New Zealand such as the country has lacked for years—concise, authoritative, reasonable in price, and with over 400 fine line-drawing illustrations by the author's competent pen. Primarily a guide book to the New Zealand natural history exhibits in the Auckland Museum, the booklet will also serve the worthy purpose of introducing to hosts of school and college students, overseas visitors and others, the fascination of New Zealand wild life. Birds are allotted 12 pages and 41 figures, and a representative selection of species is covered. The bird illustrations are perhaps the least successful of a very fine set of drawings, probably because the medium is less sympathetic to their feathered contours, but admirable for the scaly or chitinous integuments of fish and invertebrates. The text is conveniently set alongside the half-page panel of illustrations that grace nearly every page. This book is a "must" for all naturalists whose specialised topic is coupled with a general interest in all groups of animals.—(C.A.F.)

Date of Publication—January 1, 1948.

The Masterton Printing Co., Ltd., Lincoln Road, Masterton.