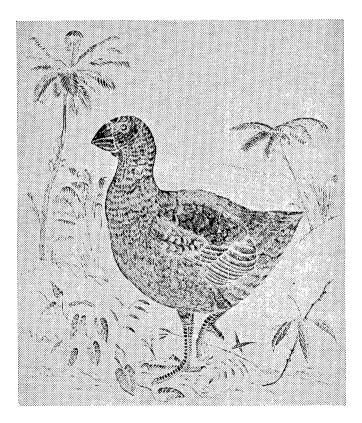
Notornis

In continuation of New Zealand Bird Notes.



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

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ENDOWMENT MEMBERSHIP.—The cost of production of Notornis is considerably higher per member than the nominal subscription of 5/per annuuc, and as costs of printing tend to rise members are invited to convert their ordinary subscriptions into endowment subscriptions.

NOTES ON PARENGARENGA HARBOUR WADERS.—Correction, Vol. 4, p. 129: for "English and Illustrated Magazine," read "English Illustrated Magazine." A photostat of Buckland's illustrated article on godwits in the above entitled "One of the Most Remarkable Sights in Nature" has been obtained for the Library and is now available for loan.—E. G. Turbott.

ECOLOGICAL SOCIETY FORMED.—At a meeting held in Christchurch on May 24, 1951, and presided over by Professor B. J. Marples, it was decided to form a society "for the promotion of the study of ecology in all its aspects." There is a fairly even division of interested workers in the main fields of botany and zoology, and some ornithologists may desire to associate themselves with the Society. Inquiries shculd be addressed to Mr. K. R. Allen, Fisheries Laboratory, Wingfield Street, Wellington, N.1.

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OBSERVATIONS ON WRYBILLED PLOVER AT KARAKA. By D. A. Urguhart and R. B. Sibson, Auckland.

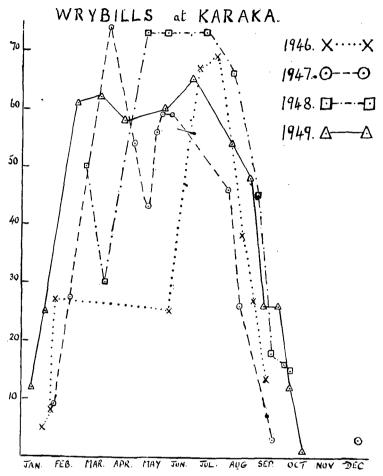
Although the tidal flats of Manukau Harbour have been known since 1878 as a winter haunt of the wrybilled plover (Anarhynchus frontalis) the records till 1946 had all come from a comparatively small area, namely, the flats between Mangere and Puketutu Island. However, on 20/1/46 D.A.U. found a small party feeding on the soft mud at the mouth of Whangamaire Creek, near Karaka, in the south-eastern corner of Manukau and some ten miles distant from the one known wintering ground of wrybills in that large harbour. The question which at once posed itself was whether they were birds on passage or whether they were the first arrivals of an unknown wintering flock. It is worth mentioning that in 1946, 41 wrybills were already back near Puketutu on January 16th.

Subsequent observations, made mainly by D.A.U. between 1946 and 1951 have shown that as long as the population of wrybills remains numerically as strong as it is at present some may be found in any year on the Karaka coast between January and September and occasionally in October, November and December. In the vicinity of Puketulu there are so far no records of wrybills for November, but at Karaka, in 1950, a flock of 12 was present throughout that month and the next. Till then the wrybill had not been known to summer as a non-breeder in Manukau, although summering has been proved not infrequently in the Firth of Thames. At Karaka it is unlikely since observations began that in any November wrybills have been overlooked. There has been no relaxation of watching, as waders from the Arctic are still coming in, and in particular the local flocks of turnstones (Arenaria interpres) and Pacific golden plover (C. dominicus fulvus) are being augmented at this time.

The accompanying graph is more or less self-explanatory, but a few remarks are necessary. There were two long intervals when owing to the absence of U., no counts were made, the first in the late summer and autumn of 1946, the second in January and February, 1948; but U. had already recorded the return of the first migrant wrybills for that season on 25/12/47. The strange shape of the 1946 graph is also in part to be attributed to the fact that the movements of wrybills in this locality were at that time imperfectly understood. It is likely that the twenty-five seen on June 3rd represent less than half the total number actually present on the Karaka coast.

A study of the graph reveals that a slight peak may occur in March or April followed by a decline and a rise as the population settles down about May for the winter months. This peak was most noticeable in 1947. Similar peaks have been noted elsewhere, e.g., at Puketutu and in the Firth of Thames, not only for wrybills but also for migrant South Island pied oystercatchers (**H. ostralegus finschi**). A reasonable explanation may be that some birds halt for a few days before passing on to wintering grounds further north, e.g., Kaipara.

After April, when the winter flocks have settled down to a fairly consistent pattern of behaviour, it is not as a rule difficult to make an accurate count. The main winter high-tide roost at Karaka is not near Whangamaire Creek, where the first birds to return were found in January, 1946 and again in February, 1947, but on the sand of the open beach or at the very big tides on a shell bank. In 1949 an interesting change of behaviour was noted. Some acres of what was once salt-marsh had been reclaimed by the building of a stop-bank, roughly drained and ploughed. In the turned-up soil were many white shells. As the ground dried out in the hot January sun banded dotterels (C. bicinctus), turnstones and golden plovers took to spending many hours there, where they were remarkably invisible among the ridges. On January 23, twenty-five wrybills had joined them, and during the following three months about sixty were habitually present at full tide. They were last seen there on April 16, after which they re-transferred their affections to the open beach. Further ploughing of reclaimed saltings was done late in 1949. On 5/1/50 the first wrybills to return to Karaka were found on this newly-turned land, again in company with banded dotterels, turnstones and golden plovers.



The Karaka graphs which cover four seasons corroborate observations made at Puketutu, for which figures (not published) are now available for twelve successive seasons. The winter flocks are built up gradually, reaching a maximum in late March or April, after which there is a slight decrease. Then for about three months the flocks remain stable. Towards the end of July they begin to break up. The numbers decline sharply in August and by the end of September very few birds are left. So far there are no records of wrybill flocks of any considerable size south of Manukau Harbour and the Firth of Thames.

There is no evidence that the number of wrybills wintering at Karaka has increased to the detriment of the Puketutu flock. In the Emu (Vol. 43, p. 50), S. showed that over the period of the three years 1940-41-42 there was an increase of wrybills wintering on the Puketutu flats. This increase has continued, most remarkably now, over twelve seasons, with the result that whereas in 1940 eighteen was the greatest number recorded, in 1945 at least ninety and in 1949 more than two hundred were present during May, June and July. This figure was surpassed in 1950, and during March and April, 1951, while c. 300 (max. 310) were being recorded on Puketutu Fats, U. at Karaka was recording over 200 (max. c. 250).

It is interesting to compare the size of the two wintering flocks over five years, autumn peaks being disregarded:---

	1946	1947	1948	1949	1950
Puketutu	135 - 142	c. 192	196 - 210	200 - 225	c. 240
Karaka	c. 67	54-59	73	60-65	c. 190

Thus, while at Puketutu the increase in 1950 was comparatively slight, at Karaka the number of wintering wrybills trebled. The two flocks appear to keep quite distinct and so far there is no evidence of intermingling. At very high tides the Puketutu wrybills have been seen to mount very high and disappear in a north-easterly direction. Where they go has not yet been discovered, but it certainly is not Karaka.

In the Emu (Vol. 43, p. 50) it as stated by S. that the first migrant wrybills reached Manukau in early February. In the light of later experience this statement must be revised; for since the numbers visiting Puketutu have increased, many birds have been reaching their winter quarters in early January, and both at Karaka and at Puketutu the earliest arrivals have occasionally been recorded even in December, viz., Puketutu, one on Dec 27, four on Dec. 30, 1947, two on Dec. 23, 1948; Karaka, three on Dec. 25, 1947. These U. described as appearing to be "two adults fussing around a juvenile."

Observations of wrybills in their winter haunts on the great tidal flats of the Auckland province indicate that this unique endemic species is flourishing. On its breeding rivers in Canterbury it may have benefited from erosion and the cleansing effects of great floods. Introduced vermin do not appear to be a serious menace and not improbably it is as numerous as it ever was. In Manukau alone, on 31/3/51, the two known flocks contained at least 530 birds; for while U., at Karaka, was counting almost exactly 250, S., near Puketutu, was showing more than 280 to two visitors from England, one of whom was busy taking a film of them.

VISIT TO THREE KINGS.—I have recently returned from my seventh visit in my yacht "Rosemary" to the Three Kings. I saw very few gannets until I approached the Kings, when about 100 were observed diving into a shoal of fish. Large numbers of Buller's shearwater were seen around the Kings, often in flocks of 50 to 100. This year it was more numerous than during my previous visits. Thousands of fluttering shearwater were seen near and one egg was obtained on the West King. The white-faced storm petrel and the diving petrel were fairly common and on each of the three days I was at the Kings I estimated that I saw at least 100 of each. The red-billed gull was thicker than ever and is steadily increasing each year since the extermination of the goats. The gannet appears to be slowly increasing, but the weather prevented me making a check of all its nesting places. At the Kings I estimate that there must be close on 6,000 gannets, and yet I saw only one flock diving in the vicinity of the Kings. All the gannets when on the wing were either going to or coming from the north-east. As to bird life on the West King I saw very little. The weather was wet and very foggy and I saw only six bellbirds, parakeets, and an odd blackbird during the short time I was on the island. During my seven visits to the Kings I have observed that there is a strip of sea extending up to 12 miles off the north-east coast in which very few sea birds appear, but outside of this strip I have seen sea birds by the thousands, principally Buller's and the fluttering shearwaters. This area of sea also is devoid of whales and shoal fish.-Magnus E. Johnson, Auckland, 23/1/51.

BIRDS IN MANAWATU DISTRICT.

By Robert A. Wilson, Bulls.

The Manawatu County near the sea coast seems a favourite area for visiting birds or birds blown over from Australia. Several spine-tailed swifts were picked up in the district a few years ago and white herons are occasionally reported.

In October, 1935, a strange bird was reported near Foxton, and on investigation I found it was a glossy ibis. It lived on the lakes north of Foxton for several years. The last reported date of its being seen was November, 1942.

In 1944, I observed across the river at Foxton Heads four white birds which I presumed were white herons, but on receipt af a report by Mr. Stidolph, I investigated them more closely, and found they were royal spoonbills. Since then the spoonbills have made the mudflats at Manawatu Mouth their main feeding ground though they have been reported from the Patea River to the north and Waikanae to the south, and on one occasion from Lake Ellesmere. While at Foxton they have never shown any signs of breeding, though I have kept them under observation. In July, 1946, after being reported from Ellesmere, only three returned. In 1947 there were three, but in 1949 and 1950 they were reduced to two, and early in 1951 to one bird.

Last year, however, Dr. Falla reported having seen a pair of royal spoonbills in breeding plumage at the white heronry at Okarito. A few months ago the one royal spoonbill at Foxton was reinforced by three more. When circling about flying the three kept together as if a family party while the fourth seemed an outsider. This party may be a pair which has nested at Okarito and reared one young and returned to Foxton.. At present however they have separated into two pairs as if the single bird had mated with one of the three.

The latest visitors to report on are white-fronted herons. I was told of strange birds being reported near the Moutoua Swamp and went to investigate. Visiting a small clump of tall white pine trees I saw a pair of these herons perched in a tall tree. They were very wild and flew when I was a good distance away but returned to the same tree, so it is possible they may nest there. Though I saw only two, four birds are reported to be in the locality. Possibly these are from the heronry reported to be near the mouth of the Waitaki, in the South Island, as it does not seem likely they would be blown over in that number from Australia.

NOTES ON THE HEATHCOTE-AVON ESTUARY.—My observations are similar to those of David E. Crockett (Notornis, Vol. 4, No. 6) headed "Christchurch Estuary." The main changes in 1951 were:— (1) That godwits were not present (as far as I could observe) in the winter months (April-September). (2) There were several white-throated shags. In mid-February a young white-throated shag (black plumage) appeared in Monck's Bay, and on April 23, two adult and three juvenile white-throated shags were seen in McCormack's Bay where they remained for most of the winter. A pied shag also appeared in the same locality in May, in addition to the usual black and spotted shags. A pied shag was seen in the estuary again on October 5th. On July 1 about 30 pied stilts and 18 black swans appeared in the western end of the estuary. The black swans increased in numbers and remained much longer than usual. On October 1 there were about 200 black swans in addition to about 500 godwits and 1,000 pied oystercatchers.—G. Guy, Christchurch.

A NORTH ISLAND ROBIN NESTING RECORD.

By C. H. and Mrs. Parkin, Little Barrier Island.

A freshly completed empty next of a North Island robin was found on November 12, 1950; six feet up in the fork of a large kanuka on the bank of the Waikohare Stream, on the Little Barrier Island. One part of the tree partially overhung the next, providing shelter from the rain. Otherwise the position was very open and exposed to the light. The next was built of fibre, tree-fern scales and cobweb, the lining being of fern scale only. The eggs were usually partly sunk in the loose lining. The next was found on November 12 by a visitor to the Island, Mr. H. R. McKenzie. He watched it for the most part until November 25, after which we continued to make frequent visits until the chicks left. Our notes are:—

Nov. 13 and 14.—Nest still empty.

Nov. 15-H.R.McK. accidentally missed visiting.

Nov. 16-3.25 p.m., one egg (C.H.P.)

Nov. 17.—10.50 a.m., two eggs. This is the full clutch for this species. The female demonstrated and silently led away from the nest. Perching easily on the side of a tree-trunk she slowly fluttered her wings, raising them high above her back like a large dark butterfly. Such a picture of gentieness made the observer feel ashamed of intruding.

Nov. 18.—In three visits, once on nest, twice absent; apparently not incubating.

Nov. 19 and 20.—Severe storm; no visit made.

Nov. 21-10.15 a.m. and 6.50 p.m., female sitting; obviously incubating, not disturbed.

Nov. 22 and on to December 3.—Sitting hard, the female only; male seen four feet from nest on November 29.

Dec. 4-6.30 p.m., chicks just hatched, still wet. The female was carrying eggshells away to 20 feet from nest.

Dec. 6 and 7-Female brooding, not disturbed.

Dec. 8-Noon, female flew off nest to be fed by male on nearby tree.

Dec. 10-10.30 a.m., female flew off nest and male fed chicks.

Dec. 14 .--- 6.45 p.m., female near.

Dec. 15.--2.30 p.m., both birds appeared when nest was approached. The female feigned injury on the ground, while the male attacked, coming within a foot of the observer's face.

Dec. 17 and 18-Parents guarding nest.

Dec. 19 to 22-Seen to be feeding chicks on insects.

Dec. 23-8.15 a.m., female near, chicks in nest; 4.30 p.m., chicks had flown.

The chicks at no time, except just after hatching, showed any movement when approached. This seemed strange in comparison with other species, which, under the same circumstances, will solicit food. Perhaps this form of concealment is adopted by the robin because of its building in open situations.

The determination of the incubation period is difficult. The start of actual incubation is always hard to ascertain, and in this case the storm complicated matters. Including November 21, the period was 14 days. If incubation commenced during the storm of November 19 and 20, the period would be either 15 or 16 days.

The period from hatching to leaving the nest was 19 days.

SUMMARISED CLASSIFIED NOTES. LIST OF CONTRIBUTORS.

- C. J. Lindsay, Wellington. M. J. McCallum, Clevedon. S. I. Anderson, Miss, Herbert. H. L. Annabell, Wanganui. P. H. Basley, Ohope. M. A. E. Bayne, Miss, Dunedin. F. R. Beatson, Dunedin. M. J. S. Black, Rotorua. C. D. Blomfield, Whakatane. A. A. Boult, Wellington. G. T. Burton, Auckland. R. N. Buttle, Auckland. B. W. Campbell, Dunedin. O. R. Cartwright, Miss, Dunedin. J. D. Clark, Opotiki. W. C. Clark, Christehurch. I. D. R. Cresswell, Christchurch. D. E. Crockett, Christchurch. J. M. Cunningham, Masterton. P. S. Dale, Christchurch. M. P. Daniell, Te Kauwhata. E. W. Dawson, Christehurch. M. A. d'Auvergne, Mrs., Maraetai. J. C. Davenport, Auckland. W. H. Davidson, Dunedin. E. Dear, Kopane. B. F. Duder, Clevedon. D.N.F.C., Dunedin Nat. Field Club. J. S. Edwards, Auckland. R. A. Falla, Wellington.
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 - R. R. Marples, Dunedin. W. P. Mead, Wanganui.

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 C. K. Williams, Gisborne.
 J. D. Wilson, Auckland.
 L. Wilson, Auckland.

 - L. Winkle, Mangawhai. K. A. Wodzicki, Wellington. J. C. Yaldwyn, Wellington.

The white-faced heron continues to be reported more frequently in both islands, as many at 12 having been recorded near Auckland. Up to seven whimbrel were seen in the Miranda district. The first crested tern for the mainland of New Zealand was recorded from Spirits Bay.

BROWN KIWI (Apteryx australis) .- Minginui (45 miles S.-E. of Rotorua) on Waiau Stream, 23/10/50, 1 dead, partly eaten, apparently by wild dogs; heard each night in this area.-(R.St.P.) Whakatane Watershed, 8-9/3/51, six to eight heard, 2 nights.-(T.S.) Marakopa Valley, within last 12 years, three killed on road within mile of Te Anga P.O.-(R.E.W.F.) Hawdon River, Canterbury, lower flats, 3/2/51, one seen by T. P. Cooper.-(R.J.S.)

CRESTED PENGUIN (Eudyptes pachyrhynchus).—Houghton Bay, Wellington, 5/12/49, sick bird with damaged foot observed among rocks. —(H.L.S.)

YELLOW-EYED PENGUIN (Megadyptes antipodes).—Corpses, New Brighton Beach, one, 25/4/51, two 19/4/51, one 19/8/51, one 2/9/51.— (D.E.C.) Beach, near Nuggets, 30/9/50, pair going through ceremonies, bowing, caressing, etc.—(I.T. and L.E.W.)

LITTLE BLUE PENGUIN (Eudyptula minor).—Near Whangaroa, Jan., 51, albino seen, snow white, in contrast bill and eye appeared very dark, bird passed within few yards of yacht; seen by myself and members of crew.—(M.E.J.) Great Barrier Is., 13-22/11/50, breeding in progress, many heard at night coming ashore to their nests behind boulders and in crevices around Whagapara Harbour.—(J.C.D. and B.D.H.)

WHITE FLIPPERED PENGUIN (E. albosignata).—Corpses, one 8/1/51, Brooklands Beach; one, 25/4/51, Waimari Beach; one 3/3/51, five 31/3/51, South Brighton Beach.—(D.E.C.)

DABCH1CK (Poliocephalus rufopectus).—Muriwai Beach pools, Tarawera Road group, 9/7/51, five pairs and one trio.—(K.C.B.C.) Motuopa Bay, Lake Taupo, 29/10/50, two pairs, courtship seen.— (R.H.D.S.) Tongoio Lagoon, H.B., 17/2/51, one; ;Runanga Lake, 17/2/51, six.—(D.B.) Kourarau, Wairarapa, pair reared 2 chicks, 1950-51; one juvenile was not seen after 25/3/51, and the other after 18/8/51.— (J.M.C.) Tomahawk Lagoon, Dunedin, 19/8/51, one, also seen three previous days by others.—(L.E.W.)

CRESTED GREBE (Colymbus cristatus).—Four reported to have been seen frequently on Lake Gunn; also one seen on several occasions lower end of Lake Te Anau, March, 1951.—(K.V.F.)

DIVING PETREL (Pelecanoides urinatrix).—Little Barrier Is., 11/11/50, trip from Leigh, several hundred, mostly in first four miles; 25/11/50, return trip, two miles from L.B., 1 flying.—(W.P.M., J.W.St.P., and H.R.McK.) Great Barrier Is., 13/11/50, trip from Auckland, not seen until we approached Coromandel and then continuously until well past The Needles.—(J.C.D. and B.D.H.) Corpses: Muriwai, 29/1/51, 1 dead in 22 miles (H.R.McK.); 8/7/51, 1 fresh male; 2/9/51, two.—(N.M.)

WHITE-FACED STORM PETREL (Pelagodroma marina).—Leigh-Little Barrier Is., 11/11/50, 25 plus; 25/11/50, return trip, seven.— (W.P.M., J.W.St.P., H.R.McK.) Auckland-Great Barrier Is., 13/11/50, odd birds seen as we approached the Coromandel coast; return trip, 22/11/50, only two seen.—(J.C.D. and B.D.H.) Cape Colville-Great Barrier Is., 24/12/50, four; return trip to Waiheke Is., 31/12/50, seen all the way, c. 60 on calm water at one place.—(A.J.G.) Ohariu Bay, 24/12/49, old corpse.—(H.L.S.)

CAPE PIGEON (Daption capensis).—Corpses: Muriwai, 12/8/51, 1, (J.C.D.); 17/8/51, 1 (R.B.S.); Piha, 19/8/51, 2, one very fresh (G.E.T. and M.B.G.), 29/9/51, one (J.C.D., and N.M.); Awhitu Peninsula, 19/8/51, two (S.C.R. and V.M.R.) Lyall Bay, Wellington, 7/7/51, corpse, culmen 30mm., wing 255mm.; Ohariu Bay, Wellington, 22/8/51, corpse, culmen 30mm., wing 270mm.—(H.L.S.)

GIANT PETREL (Macronectes giganteus).—Waitemata-Noises Is., 9/12/50, one.—(N.M.) Corpses: Awhitu Peninsula, 3/9/51, one (S.C.R. and V.M.R.); Lyttelton Harbour, 10/3/51, two (E.W.D., K.H.M., W.C.C.); Menzies Bay, 7/5/51, one (E.W.D., M.E.W.)

PRIONS (Pachyptila spp.)—There was a heavy winter mortality (1951) of all species of prions; the records of various members will be published in a separate paper.—(J.C.D.)

BROAD-BILLED PRION (P. vittata).—On 24/7/51, schoolboys found a prion, weak but apparently uninjured, on a street about 200 yards from Castlecliff Beach. When released after a few hours' rest, it attempted to fly out to sea, but came down inside the line of breakers and was washed ashore again; next morning it was dead. This was following very rough weather—(W.P.M.) Ohariu Bay, Wellington, 2/1/48, corpse of juvenile bird, decomposed, culmen 35mm., basal breadth 17mm. (H.L.S.) Brooklands Beach, Christchurch, 8/1/51, one dead.—(D.E.C.)

SALVIN'S PRION (P. salvini).—Ohariu Bay, Wellington, 22/8/51, corpse, female with minute ovaries; culmen 30mm., basal breadth 16.5mm., tail 80mm., tarsus 33mm., wing 190mm; primaries and tail feathers frayed.—(H.L.S.)

DOVE PRION (P. desolata).—New Brighton Beach, 22/8/51, one dead.—(D.E.C.)

FAIRY PRION (P. turtur).—Muriwai, 27 and 29/1/51, seven in 22 miles and 1 at Maori Bay.—(H.R.McK.) Corpses: One, 25/4/51, Waimari Beach, two 10/9/51 New Brighton Beach—(D.E.C.)

FLESH-FOOTED SHEARWATER (Puffinus carneipes).—Leigh-Little Barrier Is., 11/11/50, several hundreds, mostly near Leigh, but all across; return trip, 25/11/50, one 12 miles from L.B., 100 plus in last three miles to Leigh.—(W.P.M., J.W.St.P. and H.R.McK.) Auckland-Great Barrier Is., 13/11/50, many seen until we passed Waiheke, not seen again; return trip, 22/11/50, an occasional bird sighted up to Cape Colville, from Coromandel to Waiheke continuously seen in many hundreds; seas were extremely rough.—(J.C.D. and B.D.H.) Kaiaua, Firth of Thames, 28/12/50, four plus flying past point in E.-N.-E. gale; from the number and variety seen at this spot, the Thames Estuary must have been swarming with birds owing to the severe storm.—(H.R.McK.) Waiheke, 29/4/51, 10 plus off the N.-E. corner.—(K.C.B.C.) Muriwai Beach, 29/1/51, c. 100 flying close off-shore.—(H.R.McK.) Island Bay, Wellington, 5/2/49, one bird close to shore.—(H.L.S.)

BULLER'S SHEARWATER (P. bulleri).—Leigh-Little Barrier Is., 11/11/50, several hundreds, mostly in first four miles; return trip, 25/11/50, none. Kaiaua, 28/12/50, c. 8 flew past point to north in E.N.E. gale, identity certain. Muriwai, 29/1/51, 1 or 2 flying just outside breakers.—(H.R.McK.) Clevedon River-Ponui Is., 26/11/50, 2, not often seen inside Ponui Is. Cape Colville-Great Barrier, 24/12/50, many.—(A.J.G.) Corpses: Muriwai, 27/1/51, two (H.R.McK.); 8/7/51, two, recent (J.C.D and N.M.). Karekare, 14/7/51, one, fresh (N.M.) Westshore Beach, Napier, 23/11/50, corpse; Ocean Beach, 3/2/51, another.—(D.B.) Petone Beach, 23/2/47, corpse (E.B.J.) New Brighton Beach, 17/5/51, corpse (D.E.C.)

SOOTY SHEARWATER (P. griseus).—Kaiaua, 28/12/50, 6 plus flew past point in E.N.E. gale, silvery patch under wing seen. Corpses: Clevedon, Mataitai Beach, 1 dead, dry, almost certainly a victim of storm on 28/12/50.—(H.R.McK.) Muriwai, 8/7/51, 1 recent (J.C.D. and N.M.); 15/7/51, 1 in 23 miles (D.A.U.); 17/8/51, 1 (R.B.S.) Piha, 4/6/51, 2, one just ashore (J.C.D. and M.B.G.); 19/8/51, 1 (M.B.G. and G.E.T.)—(unusual dates to find this bird.) Rakaia Mouth, 9/1/51, Waimari Beach, 17/4/51, South Brighton Beach, 24/5/51 (D.E.C.). Birdling's Flat, Canterbury, 2/2/50, at sea a huge flock (estimated at 500,000 approx.) flying south at mid-day.—(G.G.) Thousands seen off Warrington; masses on water and some flying north, some south, but main movement south, 11/10/50—(Miss C. White, D.N.F.C.) At sea, from Moeraki, in fishing launch about 10 birds seen 1-12/1/51.—(G. J. Billing, D.N.F.C.)

SHORT-TAILED SHEARWATER (P. tenuirostris).—Waikato Heads 29/4/51, 1 pair of wings found, quite fresh, evidently only a day or two old.—(D.A.U.) Lyall Bay, Wellington, 25/12/50, decapitated corpse; wing 274mm., retrices 95mm. with tips worn, tarsus 50mm.—(H.L.S.) FLUTTERING SHEARWATER (P. gavia).—Auckland-Great Barrier Is, 13/11/50, many loose flocks seen from Waiheke onwards; 22/11/50, return trip, continuously seen.—(J.C.D. and B.D.H.) Kaiaua, 28/12/50, 8 plus flew past point to north in heavy E.N.E. gale.—(H.R.McK.) Wai temata-Kawau, 20/1/51, many flocks.—(N.M.) Clevedon, 1951, frequenily seen outside Waiheke and Ponui Is.; 27/3/51, off Rakino Is., flocks of 500 to 1000.—(A.J.G.) Muriwai, 27-29/1/51, 3 dead, 1 was a juvenile with very thin bill; 100 plus feeding close to breakers.—(H.R.McK.) Waiheke-Motutapu Channel, 22/5/50, two flocks of c. 500 each.—(J.S.E.) Ocean Beach, Napier, 3/2/51, two corpses.—(D.B.)

ALLIED SHEARWATER (P. assimilis).—Muriwai, 29/1/51, 1 dead (H.R.McK.)

BLACK PETREL (Procellaria parkinsoni).—Little Barrier Is., Nov., 1950, a few dead about the Summit.—(J.W.St.P.) 25/11/50, at sea, three single birds at intervals, on water and also flying, thought to be this species, compared with **P. carneipes**, blacker, less light on side of bill, more pointed wings, ''shoulders'' not hunched.—(W.P.M., J.W.St.P. and H.R.McK.)

WHITE-HEADED PETREL (Pterodroma lessoni).—Corpses: Muriwai, 27,29/1/51, 3 in 22 miles (H.R.McK.); 11/3/51, 1, June, 1951, 1 (R.N.B.); 12/8/51, 2, one still alive being pecked by black-backed gulls (J.C.D.); Awhitu Peninsula, 20/5/51, 2; August, 7 (S.C.R. and V.M.R.) Piha, 29/9/51, 2 (J.C.D., and N.M.); Ohariu Bay, Wellington, 26/11/48, fresh corpse, culmen 38mm, wing 310mm; 11/10/51, fresh corpse, culmen 35mm, wing 315mm, tail 138mm (H.L.S.) South Brighton Beach, 22/8/51 corpse (D.E.C.)

MOTTLED PETREL (P. inexpectata).—Muriwai, 27/1/51, 2 dead in 22 miles.—(H.R.McK.)

COOK'S PETREL (Pt. cookii).—Little Barrier Is., 17/11/50, trip to Summit, 2 fairly recently dead containing eggs, 1 alive with broken wing, and old remains; no extra mortality in nesting colony after severe two-day storm.—(J.W.St.P.); return to Leigh, 25/11/50, one to five miles from L.B., several thousands; 5 to 6 miles, a few odd ones; then none; at 12 miles (3 miles out of Leigh), one and three.—(J.W.St.P., W.P.M. and H.R.McK.) Miranda, 10/2/51, one seen at c. 100 yards in rough sea and easterly gale.—(H.R.McK.)

WANDERING ALBATROSS (Diomedia exulans).—Corpses: Muriwai, 18/5/51, one (R.N.B.); 15/7/51, one adult, a non-breeding male, in full white plumage and one immature (D.A.U. and E.G.T.); Awhitu Peninsula, two in August, 1951 (S.C.R., V.M.R., G.T.H. and R.S.H.).

ROYAL ALBATROSS (D. epomophora).—Corpses: Muriwai, 18/5/51, one (R.N.B.); Awhitu Peninsula, two in August, 1951. (S.C.R. & V.M.R.)

BLACK-BROWED MOLLYMAWK (Thalassarche melanophrys).--Corpses: Awhitu Feninsula, August, 1951, one adult and one juvenile.--(S.C.R. and V.H.R.)

BULLER'S MOLLYMAWK (Th. bulleri).—Island Bay, Wellington, observed near land from shore on the following dates: 30/4/48, 4/1/49, 5/3/49, 12/6/49, 24/6/49; a bird on one occasion was seen being chased by a gull.—(H.L.S.) About six miles out to sea from Moeraki, in fishing launch, six seen Jan., 1951—(C. J. Billing, D.N.F.C.)

WHITE-CAPPED MOLLYMAWK (Th. cauta).—Great Barrier, 21/11/50, a non-breeding female was found, almost dead, on Kaitoke Beach; it was the Bounty Is. sub-species Th. c. salvini.—(J.C.D.) Island Bay, Wellington, seen from shore on following dates: 15/11/47, 20/2/48, 5/3/49, 17/3/51 and 30/4/48. The bird seen on 30/4/48 had a pure white head. This bird could have been either of the usual local race Th. c.

salvini or referable to another race. It is noteworthy, however, that the nuchal feathers of **Th. c. salvini** may turn white with wear.—(H.L.S.) New Brighton Beach, corpses, 29/4/51, one; 17/5/51, one; 10/9/51, two.—(D.E.C.)

WHITE-THROATED SHAG (P. melanoleucos).—Upper Waitotara, Dec., 1950, breeding; some young just flying; others still in nests.— (H.L.A.)

GREY-HEADED MOLLYMAWK (Th. chrysostoma). — Muriwai, 15/7/51, one freshly dead, an immature female.—(E.G.T.)

LITTLE BLACK SHAG (Phalacrocorax sulcirostris).—Maraetai, Clevedon, 23/7/51, 18 on wharf.—(R.J.F.); 26/7/51, nine swimming in close party—(D.J.S.) Hamurana Springs, L. Rotorua, 8/11/50, four seen, three of them sitting on a punt with a black shag.—(M.J.S.B.)

SPOTTED SHAG (Stictocarbo punctatus).—Muriwai, 27, 29/1/51, 1 alive and four dead, three were lying close together 22 miles up beach, having been shot.—(H.R.McK.) Palliser Spit, 15/7/51, one diving off shore.—(K.H.D.S.) Katiki Beach, Otago, 29/1/51, two.—(L.E.W.) Near Nugget Point, 30/9/50, numbers in vicinity; Lake Forsyth, Banks Peninsula, one, man was going to shoot it.—(I.T., L.E.W.)

GANNET (Moris serrator).--30/12//50, many gannets scared off the water between 1 a.m. and 3 a.m. in darkness by a launch amongst the small islands off Gt. Barrier Is.--(R.V.R.) Kawhia (Te Maika), 18/2/51, one immature corpse; 21/2/51, one immature corpse.--(N.M.) Wellington Harb., 22/9/50, first gannet noted for some time; 20/10/50, gannets seen near the Floating Dock during the nesting season when these birds are usually absent from Cook Strait area; 10/4/51, small flock diving continuously; 18/5/51, two in harbour.--(R.V.R.) Menzies Bay, Aug., 1950, two (E.W.D.). Titahi Bay, 17/2/51, one.--(E.W.D., J,C,Y.). One mature and one imm. at sea off Sth. Brighton, 10/3/51.--(E.W.D., P.S.D., W.C.C.). Menzies Bay, 7/5/51, one.--(E.W.D.) Karatane, 14/5/51, three, one diving.---(J.P.C.W.) Allan's Beach, Otago Peninsula, 6/5/51, 20, one in immature plumage.---(B.J.M.)

WHITE HERON (Casmerodius albus) .- Whangaroa, Northland, 20/6/51, one in harbour but chased away by gulls.-(T.M.R.) Kawa Kawa Bay, Clevedon, 23/3/51, one feeding on tide flat, seen only once so was probably moving north.—(M.J.M.) Whitianga, Mercury Bay, one came early May, 1951, still present up to 17/8/51, report by Mr. M. J. Thorn.--(H.R.MeK.) Lake Rerewhakaitu, south of Rotorua, 10, 13, 14/5/51, one seen at east end of lake by Mr. Baden Prentice on fishing trips; it was very quiet.—(R.St.P.) 29/8/51, three near Napier .--(J.D.W.). Near Napier, 25/4/51, three; 5/6/51, two; 19/6/51, four; 11/5/51, one reported Opoutama, near Mahia Pen., and one Tokomaru Bay "quite recently" (May).-(D.B.) Woodend, 1951, two.-(W.C.C.) Waimakariri Estuary, 12/5/51, one; Christchurch Estuary, 20/8/51, one under constant attack from black-backed gulls.-(D.E.C.) Kaiapoi district, near Christchurch, four seen during the winter months of 1951. They have been kept under observation, since 4/7/51, by Rima Hopkin-son, Barrie Keetley, Nola Burgess, David Beggs, Alvin Todd, Ronald Marriott and others of Form I., Kaiapoi Borough School.—(E.W.D.); two, Kaiapoi, 16/9/51 (E.W.D., F.R.N.). Merton Swamp, 9/7/51, one.— (R.M.J.) Herbert, 23/2/51 to 26/4/51, one visited a farm at intervals; it was seen feeding in a creek and roosting in macrocarpa trees; first occurrence in this locality.-(S.I.A.)

WHITE-FACED HERON (Notophoyx novaehollandiae) — Manukau Harbour (a) Puketutu Causeway, 5/8/51, 1 (R.B.S.); (b) Karaka, a flock of varying numbers present during the winter; 12/5/51, 1; 31/5/51, 6; 26/7/51, 12; 26/8/51, 7.—(D.A.U.) Clevedon, 19/2/51 to 14/7/51, one seen frequently; Miranda, 24/6/51, one; Waiuku Channel, 6/5/51, three; 27/5/51, one—(H.R.McK. et al.) One near Studholm Junction, five Blueskin Bay, 30/1/51; Waikouaiti River, 27/3/51, one.—(I.T.) Waitati Bay, Otago, 19/11/50, four; Waikouaiti River, Otago, 27/3/51, close view of bird, very pale in colour, very little white, legs bright yellow.— (L.E.W.)

REEF HERON (Demigretta sacra).—Cornwallis, Manakau Harbour, 18/8/51, seven sitting on wharf; Shelly Park, Howick, 1/9/51, six; Howick, one or two present throughout year, three seen on 27/1/51 and 21/7/51.—(N.M.) Rocky foreshore, New Plymouth to Oakura and Waitara, several.—(O.E.G.) Waimakariri Est., 18/5/51, six feeding.—(D.E.C.) Menzies Bay, 5-11/5/51, one; Christehurch Est., 18/3/51, 8/4/51, 12/8/51. (E.W.D.)

BITTERN (Botaurus poiciloptilus).—Minginui, May, 1951, one has returned as usual for its annual moult.—(R.St.P.) Swamp, Cape Foulwind, 1/1/51, one.—(C.J.L.) Shag River, Dunback, 10-15/1/51, two.--(F.R.B.) Merton Swamps, 21/10/50, one—(Mrs. J. Hickman, D.N.F.C.) Stirling, May, 1949, one.—(R.V.McL.) Hakataramea Valley, about seven miles from Kurow, 14/12/50, one; near Struan, Hakataramea Valley, 15-16/2/51, one.—(W.A.W.)

ROYAL SPOONBILL (Platalea regia).—One feeding on Wanganui Est. for three days, 13, 14 15/3/51—.(W.P.M.) Ashley River, Nov., 1950, one seen by R. G. Frean, Christchurch.—(E.W.D.)

PARADISE DUCK (Tadorna variegata).—Minginui, 7/10/50, two flying high; 26/5/51, one flying high.—(R.St.P.) Aorangi, Gisborne, a pair arrived here in the autumn of 1948. In February, 1950, I counted 110 in one paddock where they remained till the end of April. In 1951, 90 to 100 stayed in the next paddock from February-April.—(C.K.W.) Kopane, Manawatu, 26/3/51, eleven in flock.—(E.D.) Lake Guyon, 3/1/51, 50 plus; Lake Christopher, 2/1/51, four pairs.—(W.C.C.) North branch of Routeburn River, 27/12/49, four; upper reaches Olivine River, near Cow Saddle, N.W. Otago, 29/12/49, two pairs; Hidden Falls River, near junction with Hollyford, 6/1/50, twelve.—(W.A.W.) Lagoon, Titan Rocks, Garvie Mts., 3/1/50, pair; Old Man Range, 6/1/50, pair. In January, 1951, for the first time on numerous visits made to the Routeburn Valley over a period of years, no paradise ducks were seen on the river flats near the Routeburn Huts.—(E.M.M.)

GREY DUCK (Anas poicilorhynca).—Christchurch Est., 29/7/51, 100 plus; Lake Christopher, 2/1/51, 20 plus; Lake Guyon, 3/1/51, 70 plus.— (W.C.C.) Stirling, 19/4/51, numbers assembling on pond as usual in May, with mallards and resident mallard-domestic hybrids. Not so easily frightened off as in past winters; 11/5/51, c. 60 on pond, many more under willows.—(R.V.McL.)

GREY TEAL (A. gibberifrons).--Gladstone, Wairarapa, 4/11/50, nests, 8 eggs (hatched 5/11/50); 8 and 9 eggs (both found deserted, 1 broken egg out of nest).--(J.M.C.)

SHOVELLER (A. rhynchotis).—Wanstead Swamp, 13/11/49, duck with seven ducklings.—(K.W.) Lake Tuakitoto, near Kaitangata, 30/9/50.—(I.T., L.E.W.). Stirling, 1949, three pairs; 1951, none on sanetuary.—(R.V.McL.)

BLACK TEAL (Aythya novaeseelandiae).—Muriwai Beach pools, Tarawera Road group, 9/7/51, c. 30.—(K.C.B.C.) Hamurana Stream, L. Rotorua, 8/11/50, above the tearooms, c. 62, drake predominating.— (M.J.S.B.) Lake Waikaremoana, 4/3/51, eight.—(T.S.) Tiniroto Lake, East Coast, 25/11/50, at least four seen.—(K.W.) Monowai Canal, Dec., 1950, several.—(C.B.T. and J.S.E.)

BLUE DUCK (Hymenolaimus malacorhynchus).—Minginui, 22, 23/10/50, Waiau Stream, 6 and 2, two pairs of 5 and 2. These young birds were the prettiest I have seen, with their ivory bills, grey-white

necks and breasts, bluish-brown backs and black eyes. The drake swims about in a position where he can see up and down stream and when you come upon them he gives a piercing whistle and swims away a little to lure you while the duck makes for the nearest patch of driftwood to hide the little ones. The two broods were only a few days apart in age so that October must be the principal hatching month for the blue duck; 18, 19, 20, 21/4/51, 3, 2, 9, 2; 8, 9, 10/5/51, 2, 10, 2.—(R.St.P.) Waikare Stream, 7/3/51, at least six.—(T.S.) Edwards River, Arthur's Pass, 6-8/1/51, one.—(E.W.D.) Lower Hilden Falls Valley, W. Otago, 6/2/51, two; two in same valley about a mile from previous locality; calls upper N. branch Routeburn late p.m. 7/2/51.—(B.W.C.)

CANADA GOOSE (Branta canadensis).—Lake Guyon, 3/1/51, 100 plus; Lake Tennyson, 5/1/51, 150 plus.—(W.C.C.) Washdyke Lagoon, Timaru, 16/10/50, 2.—(J.M.C.)

BLACK SWAN (Cygnus atratus).—Waikokopu Creek, Whitford, 29/7/51, 15.—(M.A.dA. and C.D.B.) Shelly Park, Howick, 3/6/51, 49; Clarke's Beach, Manukau Harb., 16/6/51, 500 plus; Kawhia, 25/2/51, 200 plus.—(N.M.) Lake Guyon, 3/1/51, two; Lake Brunner, 3/6/51, 29; Christehurch Estuary, 29/7/51, two, 12/8/51, 36 plus.—(W.C.C.) Ashley Mouth, 19/5/51, c. 20 (E.W.D., J.C.Y.), flooded paddocks, Horotane Valley, Ch-ch., 22/5/51, 12 (E.W.D., J.C.Y.), flooded paddocks, Horotane Valley, Ch-ch., 22/5/51, 12 (E.W.D., J.C.Y.), Christehurch Est., common during winter, 1951.—(E.W.D.) Lake Ellesmere, Canterbury, 22/8/50, thousands; Tomahawk Lagoon, Otago, 11/5/51, 39.—(L.E.W.) Lake Waihola, 29/8/50, 150 to 200; 19/9/50, 250 to 300.—(I.T.) Lake Tuakitoto and Lake Waihola, 30/9/50, hundreds on both lakes.—(I.T., L.E.W.)

WHITE SWAN (C. olor).—Lake Pupuke, Takapuna, pair recently reared six young, which is unusual.—(R.B.S.) Two, Ashley Mouth, four, Waikuku, 19/5/51—(E.W.D., J.C.Y.) Tomahawk Lagoon, Otago, 15/7/50, 7; 18/9/50, pair seen, one on nest in rushes; 11/5/51, six.— (L.E.W.) Lake Waihola, 29/8/50, 19/9/50, two.—(I.T.)

BUSH HAWK (Falco novaeseelandiae).—Minginui, Nov., 1950, to June, 1951, hardly any seen up to Feb., then 1 or 2 fairly often about bush workings and up to five in one day on hunting trips. The bush hawks are mostly up the rivers and they do great damage among the pigeons each year. On one hunting trip we saw several lots of feathers where pigeons had been struck down and eaten. One day we saw three bush hawks chasing one pigeon. One followed it through the trees while the other two kept above, ready to strike if the pigeon rose above the trees, or if it crossed a clear space. I have often seen one hawk chasing a pigeon and have seen the kill, but this was an example of team work. So far as we saw, the pigeon escaped by keeping low through dense growth, but it was a very lucky one.—(R.St.P.) Hunua, Aug., 1950, one seen, third in c. 15 years.—(D.N.L.) Ngaio, 18/5/51.—(E.B.J.) Wadestown, 19/5/51.—(R.V.E.) Governor's Bush, The Hermitage, Mt. Cook, 30/6/51, presumably the same bird seen near Governor's Bush, 1/7/51; White Horse Hill, 2 miles from Hermitage, another noted on dead tree, screeched incessantly and could be heard long after observer had passed from view, 8/7/51.—(R.M.J.) Base of Kirkliston Range, near Hakataramea Station, South Canterbury, 30/1/51, one.—(W.A.W.)

HARRIER (Circus approximans).—Howick, one seen chased by two red-billed gulls.—(N.M.) Minginui, Nov., 1950, to June, 1951, not plentiful, one to four most days, but none for several days at times.—(R.St.P.) Taupo, 12/7/50, feeding on fresh horse corpse.—(K.W.) Twice visits paid to a bird table, Maori Hill, Dunedin, 1 and 7/7/51, this was next door to the house where I.T. reported a young harrier perched on a ehimney on 23/3/50, in Notornis, Jan., 1950.—(E.M.M.)

PHEASANT (Phasianus colchicus).—Howick, 15/8/51, two hens chased a red-billed gnll, flying about 100 feet from the ground, round and round, eventually sending it out to sea; then the pheasants dropped to the ground again and resumed feeding.—(N.M.) BROWN QUAIL (Synoicus ypsilophorus).—Dargaville-Waipoua Rd., 8/2/51, 2 along roadside; Hikurangi-Whangarei Road, 12/2/51, three; Ruakaka, 13/2/51, 3.—(N.M.) Minginui, Nov., 1950 to June, 1951, one or two at odd times, one flock of nine.—(R.St.P.)

CALIFORNIAN QUAIL (Lophortyx californicus). — Karekare, 14/7/51, eight feeding on lawn near boardinghouse.—(N.M.) Minginui, Nov., 1950 to June, 1951, summer, up to c. 30; autumn, up to c. 400; pairing noted, Nov.; many chicks Jan.; 20/1/51, on upper Whirinaki River, a pair with brood of day-old chicks, two miles inside bush.—(R.St.P.)

NORTH ISLAND WEKA (Gallirallus greyi).—Tuhunga Road, off Tiniroto-Gisborne highway, 25/11/50, at least four heard in a 50-acre patch of bush.—(K.W.)

BANDED RAIL (Hypotaenidia philippensis).—Whangaroa, Northland, 1950-51, certainly increasing.—(T.M.R.) Huia Stream, Waitakeres, 15/5/51, c. 12 feeding in open near the mouth.—(K.C.B.C.)

SPOTLESS CRAKE (Porzana tabuensis).—Ngahere, Grey Valley, Feb., 1951, one.—(R.J.S.)

MARSH CRAKE (P. pusilla) — Mangawhai, 15/2/51, first seen in district; feeding on tidal mudbank. — (L.W.) Forest Lakes, Otaki, 5/5/51 three seen by Mr. C. McArthur. — (C.J.L.)

PUKEKO (Porphyrio poliocephalus). — Lyall Bay, Wellington, 21/8/48, fresh corpse; Ohariu Bay, Wellington, 13/1/51, remains found, wing 300mm.; cf. Oliver, N.Z. Birds, 1930, who gives measurements of wing as 290mm.—(H.L.S.) Lake Ellesmere, near Birdling's Flat, 5/5/51, c. 200 seen by Mr. C. Holmes—(D.E.C.) L. Waihola, 29/8/50, over 100; 30/9/50, 60 plus.—(I.T., L.E.W.)

SOUTH ISLAND PIED OYSTERCATCHER (Haematopus finschi). SOUTH ISLAND FIED OFSTERCATOFIER (Raemacopus miscur). Puketutu Causeway, Manukau Harb., 12/1/51, three seen on rocks near Island, 4/2/51, 45 plus (J.C.D.); 300 plus wintered (R.B.S.) Miranda coast, 1950-51, lowest spring count, 4/11/50, 28, rising to 10/2/51, 253 plus, 18/3/51, c. 300; and on 24/6/51, 416.—(H.R.McK. et al.) Waitotara Estuary; 11/1/51, one, a very rough day; none seen on previous and subsequent fine days.—(W.P.M.) Lake Guyon, 4/1/51, nine; Waiau River at foot of Maling Pass, 5/1/51, five; Christchurch Estuary, 29/7/51, 800 plus .—(W.C.C.) Saltwater Creek, 26/3/51, flock of c. 600 feading on mudflate: Waimakariji Estuary, 450 do -(D, E.C.) Ashlar Mouth, 19/5/51, e. 1,000 (E.W.D., J.C.Y.); 22/8/51, e. 200 (E.W.D., I.D.R.C.); 16/9/51, e. 200 (E.W.D. J.C.Y.); 22/8/51, e. 200 (E.W.D., I.D.R.C.); 16/9/51, e. 200 (E.W.D. F.R.N.). Christehurch Estuary, 8/4/51 e. 500, 12/8/51 e. 300; South Brighton Beach, 4/1/51, 57.—(E.W.D.) Heathcote Est., Chch., 19/8/50, hundreds.—(L.E.W.) Rangitata River mouth, 18/1/49, two; five days earlier 12 in flight; Opihi River, Silverstream, 22/1/49, two.-(D.N.F.C.) Kyeburn, Central Otago, 26/8/50, five. --(M.A.E.B.) Owaka Heads, 12/8/50, about 150 associated with two black and 14 pied oystercatchers, 4 godwits and 1 Caspian tern-(K.W.) Wickliff Bay, 9/8/50, two.-(Mrs. J. Hickman, D.N.F.C.) Dredge Flats, Dart Valley, 2/2/51, three. (B.W.C.) Pounawea, Otago, 13/1/51, 52; Doctor's Point, Otago, 18/3/51, 50 plus; Taieri Mouth, Otago, 24/3/51, 95; Mudflats, Spit, Otago Heads, 8/4/51, very large flock.—(L.E.W.) Flock on Sandy Spit, Karatane, 10-19/5/51; birds collected shellfish in piles for the sun to open while they waited near by. When the shells opened they stuck their bills into the cracks and forced the shells open. Each bird appeared to have a separate pile. Called during the night.-(J.P.C.W.) Allan's Beach, Otago Pen, largest count 100, 6/5/51. (B.J.M.) Taieri Mouth, 29/8/50, 52; 19/9/50, 9; 11/5/51, 43; Karatane, 92, 27/3/51.-(I.T.) Stirling, at pond, 12/11/49, saw two, not often seen. (R.V.McL.) Ocean Beach, Invercargill, 5/2/51, c. 30-(E.W.D.) Greenhills, Bluff, 5/2/51, c. 20 (E.W.D.)

NORTH ISLAND PIED OYSTERCATCHER (H. reischeki)—Great Barrier, 21/11/50, a pair with nest and 1 egg and a lone bird seen on Kaitoke Beach.—(J.C.D., B.D.H.) Miranda, 1 on 1/4/51, 2 on 23/9/51.— (R.B.S.) Maketu, 14/12/50, one by itself, black with a little white about the vent.—(A.H.W.)

BLACK OYSTERCATCHER (H. unicolor).—Russell, 11/2/51, three resting on small island next to Moturoa.—(N.M.) Karaka, one with wintering S.I.P.O.—(D.A.U.) Miranda, 1950-51, from 1 to 3 frequently seen—(H.R.McK. et al.) Allan's Beach, Otago Pen., one seen twice during May and June, 1951, three 30/6/51.—(B.J.M.) Akatore River mouth, 19/9/50, 3, reported to have bred.—(I.T.) Katiki Beach, Otago, 18/1/51, 4; Mudflats, Spit, Otago Heads, 8/4/51, 3.—(L.E.W.) Kaka Point 12/6/51, three.—(M.P.F.)

BLACK OYSTERCATCHER (Haematopus ?sp.)—Porangahau Est., 15/11/50, pair keeping territory on northern side; also present in same territory in November, 1949.—(K.W.) Waitotara Est., 27/10/50, one only: 12/1/51, three together, of which one was immature.—(W.P.M.)

TURNSTONE (Arenaria interpres).—Manukau Harb.: (a) Puketutu, 31/10/50, 27; 31/1/51, 38; 4/3/51, 38; 18/3/51, 10; 31/3/51, 36; 1/4/51, c. 20; 31/8/51, 1. (N.M., H.R.McK., R.B.S.); (b), Karaka, maximum c. 75 on 8/4/51; 3 on 24/5/51; 4 on 8/7/51; Clevedon, 14/7/51, 4; the record for Clevedon.—(H.R.McK.)

LESSER GOLDEN PLOVER (Pluvialis dominicus). — Puketuta Causeway, Manukau Harb., 4/3/51, 18; 18/3/51, 4; 31/3/51, 5; 1/4/51, 11; 12/4/51, 6.—(N.M. and R.B.S.) Karaka, maximum c. 69 on 11/3/51; last seen, 55 on 8/4/51.—(D.A.U.) Clevedon, 6/1/51, 4; 4/3/51, 6, only one well coloured.—(F.M. and H.R.McK.) North Road, Clevedon, 24/2/51, 7 on a paddock.—(B.F.D.) Waitakaruru, 10/2/51, 15 flying; 1/4/51, 17; and at Piako, 15.—(H.R.McK. et al.) Waitotara Estuary, the best count this year was six on 12/1/51, but as the birds were scatter ed feeding, there may have been more about.—(W.P.M.)

BANDED DOTTEREL (Charadrius bicinctus).—Great Barrier, 21/11/50, c. 10 pairs seen on Kaitoki Beach, at least two with nests and eggs.—(J.C.D. and B.D.H.) Muriwai, 11/3/51, 9 seen at stream mouth.—(J.C.D.) Bethells, 15/10/50, a pair with nest and 1 egg.—(N.M.) Puketuti, 1/4/51, 16 (N.M.); 1500 plus feeding on mud at low tide (A.H.H.) Whitford, 29/7/51, 200 plus in field half-mile from coast. —(M.A.d'A. and C.D.B.) Kaiaua, Miranda coast, 1950-51, breeding in usual numbers, 20 plus pairs; Piako, 29/4/51, 1000 plus in flock.—(H.R.Mc.K. et al.). Miranda, 1 nest, 2 eggs on 3/12/50; Kawhia, 21/2/51, 150 plus.—(N.M.) Tauranga Harbour, near station, Jan., 1951, one only.—(A.S.W.) Chateau Golf Links, 21/10/50, three.—(T.S.) When camped at Waitotara Estuary for six days from 10/1/51, there were only about 12 banded dotterels on the estuary and lagoon area.—(W.P.M.) Waiwakaiho River mouth, Bellblock Beach, on shingle flats.—(O.E.G.) Porangahau Estuary, 30/9/51.—(R.L.G.) Ohau Estuary, 4/3/51, c. 100.—(A.S.W.) Waikanae River Estuary, 2/2/51, only one.—(B.I.) Lake Wairarapa north, 18/2/51, 12; Lake Onoke north, 25/2/51, 1; Palliser Spit, 13/5/51, none; 15/7/51, 12; Lake Onoke north, 25/2/51, 1; Palliser Spit, 13/5/51, none; 15/7/51, 107 scattered on beach; Waimari Beach, 25/4/51, 30 in sandhills.—(D.E.C.) Ashley Mouth, 22/8/51, two (E.W.D., 1.D.R.C.); 16/9/51, three pairs, one chick ringed No. 4706 (E.W.D., P.R.N.) Rangitata River mouth, 18/1/49, seven; Ophih River, near Hanging Rock, 20/1/49, two pairs.—(D.N.F.C.) Kyeburn, Central Otago, 20/8/50, six.—(M.A.E.R.) Allan's Beach, Otago Peninsula, flock of c. 70 during May and June, 1951.—(B.J.M.)

GEOFFREY'S SAND PLOVER (C. leschenaulti)—Miranda, 4/11/50, two, one with grey shoulder tabs and one with fading reddish tabs, dark eye patches at a minimum; 28/12/50, one; 14/1/51, one showing a little new colour; 10/2/51, one; 26/8/51 and 8/9/51, one.—(H.R.McK. and R.B.S. et al.)

NEW ZEALAND DOTTEREL (Pluviorhynchus obscurus)—Ruakaka, 13/2/51, one.—(N.M.) Great Barrier Is., 21/11/50, at least 12 were seen on Kaitoki Beach.—(J.C.D. and B.D.H.) Whatipu, 21/1/51, two seen together in the sand dunes.—(J.C.D. and G.W.G.) Miranda, 7/11/50, 3 adults and one running chick (R.H.D.S.); 18/3/51, 1 adult and 2 juv., 1/4/51, 2; 24/6/51, 2, pale. (H.R.McK. et al.)

WRYBILL (Anarhynchus frontalis).—Ruakaka, 13/2/51, two; Puketutu, 11/1/51, c. 100; 4/2/51, 222; 18/2/51, 300; 12/4/51, 310; 14/4/51, 346; c. 200 on 20/8/51; c. 120 on 31/8/51.—(J.C.D., N.M. and R.B.S.) Karaka, 12 summered 1950-51, maximum count 250 on 31/3/51.—(D.A.U.) Shelly Park, Howick, 22/7/51, 24 on far side of river, first record here. —(N.M.) Waikokopu Creek, Whitford, 29/7/51, 150 plus feeding on tide flat, first record here; 11/8/51, c. 200.—(M.A.d'A. and C.D.B.) Miranda, 4/11/50, two; 30/12/50, three (N.M.); 1951 winter tally, c. 1430 (J.C.D., H.R.McK. et al.) Kawhia, 21/2/51, c six feeding at low tide; 23/2/51, three feeding by themselves.—(N.M.) Waitotara Estuary, six on 10/1/51and 12/1/51.—(W.P.M.) Palliser Spit, 23/9/51, one, full band.— (R.H.D.S.). Washdyke Lagoon, Timaru, 16/10/50, several.—(J.M.C.)

SPUR-WINGED PLOVER (Lobibyx novaehollandiae).--Wendon, Gore, female, 15/5/51-(M.J.M.)

KNOT (Calidris canutus).—Miranda coast, 1950-51, summer, several thousands; 24/6/51, Kaiaua to Thames, 630 plus.—(J.C.D. and H.R.McK. et al.) Maketu, 14/12/50, two amongst a flock of godwit, not often seen on the east coast.—(A.H.W.) Kawhia, 25/2/51, several feeding with godwit.—(N.M.)

AMERICAN PECTORAL SANDPIPER (C. melanotus).—Miranda, one on several dates from 1/10/50 to 10/2/51.—(H.R.McK. et al.) Porangahau Estuary, 16/11/50, two associated with c. 50 godwits.— (K.W.)

SIBERIAN PECTORAL SANDPIPER (C. acuminata).—Miranda, 1/10/51, four; 4/11/50, 14; 3/12/50, 10; 14/1/51, nine; 10/2/51, 18.— (H.R.McK. et al). Ahuriri Lagoon, H.B., 7/4/51, nine.—(D.B.)

RED-NECKED STINT (Pisobia ruficollis).—Miranda, one seen on 4/11/50, 23/12/50 and 10/2/51.—(H.R.McK. et al.)

CURLEW SANDPIPER (Erolia testacea).—Miraxda, one seen several times from 4/11/50 to 10/2/51 (H.R.McK. et al); 8/11/50, two feeding with sandpipers and a red-necked stint.—(R.H.D.S.)

BAR-TAILED GODWIT (Limosa lapponica).—Mangonui, 9/2/51, c. 25 on small island off coast; Ruakaka, 13/2/51, c. 20.—(N.M.) Great Barrier, 21/11/50, three very pale birds feeding on Kaitoki Beach.— (J.C.D.) Whatipu, 20/1/51, four.—(G.W.G and J.C.D.) Puketutu, Manukau Haro, 1/4/51, c. 2000; 14/4/51, c. 30.—(N.M.) Howick, 27/12/50, c. 100 on far side of creek; 11/3/51, c. 600 plus flew over toward the Manukau at about 2 p.m.; then 500 plus in same direction about 4 p.m. (low tide), some knot among them; 15/7/51, c. 300 resting above high water mark on far side, no attempt to fly away as they usually do.—(N.M.) Waikokopu Creek, Whitford, 29/7/51, four.—(M.A.d'A. and C.D.B.) Mataitai, Clevedon, 1950-51 summer population c. 1500 (H.R.McK.), 9/10/50, many while performing aerobatics hit the water with a splash (F.M.) Miranda coast, summer population c. 1290, no evidence of shooting this year.—(J.C.D., H.R.McK. et al.) Sulphur



Photo: W. P. Mead.

Point, Tauranga, 9/5/51, c 26 all in winter plumage, may be total winter population for the harbour.-(A.H.W.) Ohiwa Harbour, 12/8/51, 500 plus on sand-bar on east side of harbour, probably the full winter population.—(P.H.B.) Kawhia, 21/2/51, 14; Rakanui, 25/2/51, 200 plus. —(N.M.) Tauranga Harbour, Jan., 1951, c. 500 near station; Maketu, 25. (A.W.) Population Porangahau Estuary, 30/9/51, c 27.-(R.L.G.) 25.—(A.S.W.) Ohau Estuary, 12/6/51, six.-(A.S.W.) Okarito, 7/5/51, two.-(G.G.) Christchurch Estuary, 8/4/51, nine and 50 plus, winter plumage.—(E.W.D.) Ashley Mouth, 16/9/51, twelve, winter plumage.—(E.W.D., F.R.N.) Brooklands Beach, 18/5/51, seven feeding among pied oystercatchers.— Heathcote-Avon Estuary: 6/2/51, about 3000 godwits circled (D.E.C.) widely over south end of sandspit on seaward side of estuary; they were in three flocks, one of about 2000 and two of about 500 each. 23/3/51, about 1000 godwits still around; 26/3/51, no godwits remaining in estuary. In 1950 some birds (as recorded previously) returned during winter. During 1951 none were seen by me in estuary between 22/3/51 and 1/10/51. On latter date, about 500 godwits returned to estuary. 5/10/51, nock of godwits appears to have increased in number. As tide waters rise in the estuary the area of dry sand rapidly decreases in size. Black backed gulls have first priority near coast, pied oystercatchers second and godwits third; godwits are first to move as each area becomes .rowded.—(G.G.) Heathcote Estuary, 19/8/50, 27 plus; 16/12/50, large flocks (L.E.W.); 26/2/51, 30 plus (W.C.C.); 26/1/21, hundreds (I.T., L.E.W.) Heathcote-Avon Estuary, 19/2/50, large numbers, probably 2,000; 21/2/50, disappeared; 15/8/50, c. 100 in winter plumage.—(G.G.) Washdyke Lagoon, Timaru, 16/10/50, 19—(J.M.C.) Allan's Beach, Otago Penineula Moy and Lune bargest count 50, 17/6/51 —(R.B.M.) Blue Peninsula, May and June, largest count 50, 17/6/51.-(R.R.M.) Blueskin Bay, 30/1/51, 20 plus.-(I.T.)

WHIMBREL (Numerius phacopus variegatus).—Clevedon, one seen often from 28/10/50 to 18/3/51. On 5/2/51, a second whimbrel was harrying the other, its rump feathers up and tail down towards ground at severe angle. Miranda, 28/12/50, one; 10/2/51, seven in a party, five identified as N. p. variegatus, sizes varied considerably; 1/4/51, cali heard at Piako by F.M., L.H.M. and J.G.R.; 26/5/51, one; 24/6/51, two.--(R.B.S., H.R.McK., et al.)

PIED STILT (Himantopus himantopus) .-- Tara, near Mangawhai, four pairs nested in swampy area, first egg 26/8/51; have nested for four years in same place; birds in district increasing.-(L.W.) Mangonui, 9/2/51, c. 30 on small island off shore; Paihia, 12/2/51, c. 12 in bay next to Paihia.-(N.M.) Te Arai South, Rodney County, 22/10/50, 3 nests in wet field, 4, 3 and 3 eggs, one clutch chipping; Great Barrier, 21/11/50, three seen on Kaitoki Beach-(J.C.D. and B.D.H.) Mangawhai, 1/9/51, four nests with eggs.-(S.J.M.) Waikeke Is., 1/1/51, 25 plus including several young at Awaawaroa Bay.—(A.J.G.) Rotoroa Is., E. of Waiheke Is., 5/11/50, c six reported on a dam (H.R.McK.) Waiuku, 11/8/51, four on pools formed by rain in paddock; 11/8/51, at the Waitangi Falls, seven (N.M.); 6/5/51, in the channel, one seen doing aerobatics hit and splashed the water several times.—(H.R.McK.) Shelly Park, Howick, 25/11/50, none; 27/1/51, two; 4/3/51, 14; 26/3/51, 32; 14/7/51, two; 1/9/51, none.—(N.M.) Miranda, 1950-51, breeding was fairly successful; 28/12/50, a late nest, 4 eggs; 14/1/51, a small chick of this nest seen, it was observed until flying. Kaiaua-Thames, 29/4/51, c. 4,450; 24/6/51, c. 6930; 26/8/51, nest four eggs at Kaiaua.-(H.R.McK. and R.B.S.) L. Tarawera, 26/2/50, six observed on a shallow lagoon about 400 yards below the outlet, four adults and two adolescents .--(M.J.S.B.) Kawhia, 19/2/51, 150 plus.—(N.M.) Tauranga Harbour, near Station, Jan., 1951, counted 139; Maketu, 70.—(A.S.W.) Porangahau Estuary, 30/9/51, c. 4.—(R.L.G.) Kopane, Manawatu, 11/7/51, two, first of season; 16/7/51, four; 23/7/51, eleven.—(E.D.) Ohau Estuary, 4/3/51 c. 12.—(A.S.W.) Waikanae River Estuary, 2/2/51, eight.—(B.I.) Lake Wairarapa, north, 18/2/51, only four seen; Lake Onoke, north, 25/2/51, only two.—(J.M.C.) Flat Point, 16/5/51, seven; 29/8/51, six.—(J.H.S.) Karori, 1/9/49, perhaps two birds passing south-west at 2000; from the way calls were made it appeared that the birds on meeting the crest of a hill veered east and west along its ridges until the correct direction was found.—(H.L.S.) Ashley River, 25/11/50, common; two nests each with four eggs, 18/12/50; Christchurch Estuary, 12/8/51, numerous; Woodend, numerous, 19/5/51, three 16/9/51.—(E.W.D.) Heathcote-Avon Estuary, west end, 3/2/50, c. 250; 15/8/50, c. 20.—(G.G.) Rangitata River mouth, 18/1/49, 16; Opihi River, near Hanging Rock bridge, 20/1/49, 22.—(D.N.F.C.) Kyelurn, C. Otago, 26/8/50, 17 in one flock; swamp near Patearoa, c. 40.—(M.A.E.B.) Merton Swamps, 17, Kartiki Beach, six or seven, 21/10/50.—(D.N.F.C.) Stirling, 10/2/49, for three weeks have been varying number up to 15 feeding on pond; 12/4/49, very noisy at twilight. Watched two adults join three young; all marched along in line yelping like fife-and-drum band; suddenly stopped, turned right, put heads under wings; gone next day; a flood ensued; no more stilfs seen till spring; 11/9/49, one at pond; 13/9/49, pair seen; 18/9/49, two pairs; 22/2/51, three, came occasionally till 25/4/51 and 28/4/51, heard at night.—(R.V.McL.) Allan's Beach, Otago Peninsula, largest count 50, 3/6/51.—(R.R.M.) Lake Waihola, 29/8/50, eight; Akatore, 19/9/50, seven; Taieri Mouth five, and Akatore seven, 21/11/50; Shag River lagoons four, and Blueskin Bay 20 plus, 30/1/51.—(I.T.) Lake Tuakitoto, c. 40; Lake Waihola three and Port Molyneaux two, 30/9/50—(I.T., L.E.W.) Near Akatore, Otago, 31/12/50, four; Waitati Bay, Otago, 10/1/51, 50; Taieri mouth, Otago, 24/3/51, 35; foreshore, Otago Harbour, 30/3/51, 32, 10/5/51, 102.—(L.E.W.) Kew, Invercargill, 5/2/51, two; Goodwood, 6/2/51, two; South Timaru, 6/2/51, numerous; 19/1/51, 28 plus; Warrington, 19/1/51, 50 plus.—(E.W.D.)

BLACK STILT (H. himantopus).—Miranda, one with some whitish patches, seen often from 18/3/51 to 24/6/51.—(H.R.McK. et al.) Kawhia, 19/2/51, one.—(N.M.)

BLACK-FRONTED TERN (Chlidonias albistriata).— Palliser Spit, 13/5/51, c. 21; 15/7/51, c. 18; 1/9/51, none; 23/9/51, none.—(J.M.C.) Ohariu Bay, Wellington, 7/1/50, decapitated corpse, wing 225mm.— (H.L.S.) Ashley River, 18/12/50, nest with two eggs.—(E.W.D.) Ashley mouth, 19/5/51, one (E.W.D., J.C.Y.); 22/8/51, 30 plus (E.W.D., I.D.R.C.); 16/9/51, six (E.W.D., F.R.N.) On way to Mt. Peel, 19/1/49, three or four solitary birds over fields; Opihi River, near Hanging Rock, 20/1/49, c 20 adults and young on shingle island, two adults dived at intrduers; between Geraldine and Burke's Pass, 22/6/49, few over rivers; between Geraldine and Mt. Peel, 24/1/49, ten over fields.—(D.N.F.C.)

CASPIAN TERN (Hydroprogne caspia).—Mangawhai, breeding ground in the sandhills has been in occupation for at least 50 years. In October, 1950, estimate of 1500 nests in three groups, unfortunately a great deal of damage is done each year by sightseers, etc.—(L.W.) Howick, up to four seen regularly; 11/3/51, two quarrelling, screeching and flying at one another in mid-air, looked like immature birds.— (N.M.) Puketutu, Manukau Harbour, 1/4/51, 64.—(N.M.) Clevedon River mouth, 14/1/51, 70 best tally for season.—(A.J.G.) L. Tarawera, 26/2/50, four observed during the day, fishing well off shore.—(M.J.S.B.) Tauranga Harbour, near Station, Jan., 1951, 39.—(A.S.W.)

FAIRY TERN (Sterna nereis).—Mangawhai sand hills, six in flight 10/1/51; Mangawhai Estuary, one pair 17/7/51 and one pair 28/8/51; these birds were once fairly plentiful but are still not uncommon; they nest on the Mangawhai sand hills.—(L.W.)

WHITE-FRONTED TERN (S. striata).—Mohaka River Estuary, 25/11/50, 200-300 displaying and copulating on spit but only two nests with one egg each.—(K.W.) Ngawe Point, Palliser, apparently did not nest 1950-51; Mataikona, 1/1/51, small colony (eggs and chicks) reported remains seen later; Castlepoint, 16/12/50, c. 20—(J.M.C.) Castlepoint, 15/5/51, c. 60 including c. 20 immature.—(J.H.S.) Flat Point, 16/5/51,

c. 40; Pahau, 17/5/51, remains old nests seen.—(J.H.S.) Palliser Spit, 13/5/51, c. 190, only one immature; 15/7/51, none; 1/9/51, two; 23/9/51, none.—(J.M.C.) Birdling's Flat, Canterbury, 2/2/50, c. 1000 (many being that season's chicks) were flocked on the shingle beach.—(G.G.) Rangitata River mouth, 18/1/50, c. 50 young flying.—(D.N.F.C.) Diamond Harbour, 30/11/50, approx. nine nesting pairs with eggs and young.— (W.C.C.) Six at sea between Lyttelton and South Brighton, 10/3/51; six, Christchurch Estuary, 8/4/51; ten, Ashley Mouth, 19/5/51; 40 plus, Ashley Mouth, 22/8/51; c. 40 Ashley Mouth, 16/9/51; common, Menzies Bay, 5-11/5/51.—(E.W.D.) Okarito, 7/5/51, numerous,—(G.G.) Spit, Otago Heads, 8/4/51, thousands on mole.—(L.E.W.) Two at The Nuggets chased by skuas, 30/9/50; hundreds, Christchurch Estuary, 26/1/51; 241, Kartiki Beach, 27/3/51.—(I.T., L.E.W.)

CRESTED TERN (Thalassius bergii).—Spirits Bay, Northland, March, 1951, one dead, dry, at high tide mark.—(H.R.McK.)

BLACK-BACKED GULL (Larus dominicanus).—Waikanae River Estuary, 2/2/51, c. 950.—(B.I.) Palliser Spit, first chicks hatched c 1/12/50, practically all hatched by 1/1/51.—(J.M.C.) Diamond Harb., 30/11/50, two nests with three eggs each on rock ledges only few feet from sea.—(W.C.C.) Heathcote-Avon Estuary, 23/9/50, flying excitedly about east end of estuary, probably courting.—(G.G.) Lake Tuakitoto, 50; appeared to be nesting on a rocky islet, Nuggets, 30/9/50; several thousands, mouth of Kaikorai Stream, 17/5/51.—(I.T., L.E.W.) Over 100 nesting on island, Moeraki Kaik, 21/10/50; one seen, Margaret Glacier, Dart Valley, at height of 6000ft., 31/1/51.—(B.W.C.)

RED-BILLED GULL (L. novaehollandiae)—Whangaroa, Jan.-March, 1951, thousands, mostly young of the seasor, died all along the coast, apparently starved as very light; heavily infested with vermin; school fish were lacking all the season.—(T.M.R.) Howick, 24/4/51, one chasing a sparrow with a crust of bread and darting again and again at a wirenetting fence when the sparrow flew through and it was unable to follow.—(N.M.) Porangahau Estuary, 18/11/50, southern spit, about 50 birds in attendance on 21 nests, five of which contained a single egg.— (K.W.) Waikanae River Estuary, 2/2/51, c. 1150.—(B.I.) Ngawe Point, Palliser, 23/12/50, c. 100 chicks c. 10 days old; Mataikona, 1/1/51, small colony (eggs and chicks) reported, remains seen later.—(J.M.C.) Saltwater Creek Estuary, 26/3/51, c. 100.—(D.E.C.) Christchurch Estuary 29/7/51, 40 plus.—(W.C.C.)

BLACK-BILLED GULL (L. bulleri).—Matiatia, Waiheke Is., 27/3/51, one alone seen clearly, the black bill and plain upper wing noted.—(A.J.G.) Clevedon, 1/7/51, five; 14/7/51, four.—(H.R.McK.). Miranda, 1950-51 summer, a few odd ones; 1951 winter, up to 650.— (H.R.McK., R.B.S., et al.); Lake Tarawera, 26/2/50, three small parties, 9, 5 and 4, seen on lake well out from the shore.—(M.J.S.B.) Motuopa Bay, Lake Taupo, 29/10/50, two.—(R.H.D.S.) Porangahau Estuary, 18/11/50, southern spit, about 100 birds on a separate hummock, about 20 yards away from red-billed gull colony. There were 37 nests, 11 with one and one with two eggs.—(K.W.) Ada River, near Ada Station Homestead, 2/1/51, c. 150.—(W.C.C.) Lake Pearson, 14/1/51, two.— (E.W.D.) Ashley Mouth, 19/5/51, c. 40 mostly juv., 3 with rings.— (E.W.D., J.C.Y.); 22/8/51, c. 40, with one red-billed gull.—(E.W.D. I.D.R.C.) Rangitata River Mouth, 18/1/49, hundreds; Opihi River, near Hanging Rock, 20/1/49, small flocks; occasional small flocks followed tractor on farms—(D.N.F.C.)

SOUTHERN SKUA (Catharacta skua lonnbergi).—Single bird eight miles north of Moturaratiti Island, Cook Strait, 1/9/51.—(C.A.F.)

ARCTIC SKUA (Stercorarius parasiticus).-29/4/51, four seen on circumnavigation of Waiheke.-(K.C.B.C.) Kaiaua, 28/12/50, 10 plus flying past point in E.N.E. gale; no doubt more further out, but could not be identified in rain and spray; all flying north. Muriwai Beach, 29/1/51, one chasing terns outside breakers.—(H.R.McK.) Near Coromandel, 22/5/50, two circled boat.—(J.S.E.)

POMARINE SKUA (S. pomarinus)—Kaiaua, 28/12/50, one flew past point in E.N.E. gale; seen fairly clearly and compared with Arctic species, but identity not certain.—(H.R.McK.)

NATIVE PIGEON (Hemiphaga novaeseelandiae) .-- Great Barrier, 13-22/11/50, c. 10 seen during our stay.—(B.D.H. and J.C.D.) Cascades, Waitakere, 7/7/51, one; Karekare, 14/7/51, one.—(N.M.) Moumoukai, Clevedon, 1951, a pleasing increase, up to 14 seen in flock.-(J.W.St.P.) Minginui area, numbers seen: Nov., 1950, hardly any; Dec. Jan., none to six; Feb., none to nine; March, April, up to 30; May, up to 11; June, up to five, but seen only four days in thirty. Feeding noted: Late Jan., Feb., tawa fruit; March, tawa, rimu and kahikatea; April, the same, but miro in high country; May, mainly kahikatea; June, gone to supple-jack country.—(R.St.P.) Fletcher's Bay, Coromandel, May, 1950, one.— (J.S.E.) Kairimu Road, Marakopa, only odd ones flying over for years but this year (1951) two wintered quite close to house, still there 20/9/51. Western Hutt Road, Belmont, 5/8/51, one in flight.— Okute Valley, 10/12/51, two.—(D.E.C.) Christehurch Bos. (R.E.W.F.) (R.H.D.S.) Gardens, 3/4/51, 23/6/51, one.-(E.W.D.) Geraldine Hill bush, 16/1/49, three; Te Moana Gorge, 17/1/49, two; cottage owner latter place reported 40 feeding on berries of 20ft. high laurel hedge when berries are ripe; Lynn Creek, Mt. Peel, 19/1/49, three; Mt. Peel Forest, 24/1/49, count for day, six.—(D.N.F.C.) On wineberry tree outside bedroom window, Bragg's Bay, Stewart Island, 16, 5/2/50; on wineberry, Milford Sound, four, 9/2/51.—(Mrs. A. Prentice, D.N.F.C.) Woodside, 23/9/50, c 20 Dus. (D.N.F.C.) Hidden Falls Valley, W. Otago, 6/2/51, one. (B.W.C.) On edge of bush, Maungatua, at 2000ft., 2/6/51, one. (R. Gilbreath, D.N.F.C.) During the past year numbers up to seven have been recorded in gardens in Maori Hill, Dunedin.-(I.T.) Waipori Gorge, 1/4/51, c 36. -(I.T., L.E.W.) Swampy Hill, Dunedin, 6/5/51, about a dozen in bush, largest number ever seen in this area which is frequently visited.-(E.M.M.) Barrier Hut, Pyke Valley, 31/12/49, four.-(W.A.W.)

ROCK PIGEON (Columba livia).—Nesting under several wharves, Wellington Harbour, 20/10/50.—(R.V.R.) Bangitata, Canterbury, 14/12/50, large flock in paddock.—(L.E.W.)

LACE-NECK DOVE (Steptopelia chinensis)—Reported in Mt. Albert crater, 8/4/50, on ornamental cherry trees and high upon the bare rocks. The beautiful fan tail showing the white bar was clearly seen several times during the morning.—(R.V.R.)

KAKA (Nestor meridionalis).—On 12/11/50, R.H.McK. and I found a nesting hole in a puriri near the Te Waikohare Track, Little Barrier I was passing here most days during the next fortnight and Island. the bird would come out if its mate flew near calling, or if there was any disturbance against the trunk of the tree. On two occasions the sitting bird was seen to be fed by its mate high up in a nearby tree. Owing to a bend in the hole it was not possible to see down to the nest, but from the time taken by the bird to come out, it is presumed that the nest was some distance below the entrance. There was no sign of food being carried to chicks up to the time we left.-(W.P.M.) Great Barrier 13-22/11/50, very common in all the bush-clad areas, parties of seven and eight were seen aerobating in the deep valleys on the upper slopes of Mt. Hobson (2038ft.).--(J.C.D. and B.D.H.) Moehau, Oct., 1949, flock of c. 30; Jan., 1950 and Jan., 1951, odd ones; 27/8/51, two.--(G.J.B. and R.N.B.) Whenuahiti, Coromandel Peninsular, June, 1951, two seen and heard, report by Mr. M. S. Thorn.-(H.R.McK.) North Road, Clevedon, 13/5/51, one in patch of bush on Duder's Point, seen and heard .---(B.F.D.) Moumoukai, Clevedon, 1950-51, very scarce, position disquiet-ing.—(J.W.St.P.) Minginui, Nov., 1950-June, 1951, usually two seen about the bush workings; others heard. More plentiful in the higher beech country and some in the rata-tawa belt between the high country and the timber valley. 4/2/50, a nest found in a hollow half of a matai with forked trunk, 30 feet from the ground, entrance five feet above the nest, a 2in. crack in trunk from top down to nest. The bushmen felling the tree did not know of the nest and the kaka flew out when it hit the ground. The two eggs were broken and were not found until the log had been hauled 20 chains to the skids. The two kaka stayed around and called for two days, after which they remained in the locality. 8/2/51, a nest 25 feet up in a matai, containing two halfgrown young. The bushmen saw the parents flying about close to them but did not suspect a nest when felling the tree on the afternoon of the 7th. On the morning of the 8th when the log was rolled over a faint screech was heard. The tractor driver chopped away some wood and got out the surviving chick, having his fingers well bitten while doing so. It was very weak, so was taken to camp and was fed on tawa berries and konini which the bushmen brought for it each evening. At the end of a week it would eat almost any kind of food and seemed to need quite a quantity of water to drink.—(R.St.P.) Near Mt. Moehau, Coromandel, May, 1950, heard several times.—(J.S.E.) Whakatane watershed, 8/3/51, one heard.—(T.S.) Heard in bush near Alabaster Pass, N.W. Otago, 30/12/49; three flying above Pyke River, near Upper Pyke Hut, 31/12/49.—(W.A.W.) Three, Beansburn Valley, W. Otago; four in forest, Hidden Falls Valley; others heard, 3-6/2/51.—(B.W.C.) Titiroa Range, Dec., 1950, heard several times.—(B.T. and J.S.E.)

KEA (N. notabilis).—Edwards River, Arthur's Pass, 6-8/1/51, several heard, one seen.—(E.W.D.) Temple Basin, 7/7/51, seven; Ada Valley, 30/12/50, one.—(W.C.C.) Two, Cow Saddle, one heard north branch Routeburn, one slopes Mt. Hedon, Dart Valley, 31/1/51.— (B.W.C.) Two near North Col, north branch of Routeburn Valley, 28/12/49; one seen and others heard near Cow Saddle, N.W. Otage, 29/12/49; two near Hidden Falls Hut, Hollyford Valley, 6/1/50.— (W.A.W.)

YELLOW-FRONTED PARAKEET (C. auriceps). — On 12/11/50, when with R.H.McK. on Te Waikohare Track, Little Barrier Is., he saw a parakeet come out from a nesting hole in a tree alongside the track. We presumed this would be the usual red-fronted parakeet and passing there almost daily during the next fortnight I did not see the bird actually coming from the hole again. But on one occasion a yellowfronted parakeet was perched on a branch level with the nesting hole and only a few feet from it, looking towards the hole. Actually I did not recognise it as a yellow-fronted till it turned to look down at me, which illustrates the difficulty in differentiating between the two species when seen under the usual bush conditions.—(W.P.M.) Minginui, Nov., 1950–Jan, 1951, seen almost daily in very small numbers in lower areas, but more plentiful in high beech country where up to 10 seen in one day.—(R.St.P.)

PARAKEET (Cyanoramphus ? sp.)—South of Pokako, 14/11/50, heard.—(R.H.D.S.) Heard near Barrier Hut, Pyke Valley, N.W. Otago, 31/12/49.—(W.A.W.)

KAKAPO (Strigops habroptilus).—In early February, 1951, Mr Jack Ede, at the head of the Tutoko Valley, Milford Sound district, heard the booming call of a kakapo on four successive nights, but did not see the birds. He also found what appeared to be a nest of the kakapo "scratched in the ground at the base of a tree. It was about 11in. in diameter and 6in. deep, with four tracks leading away from it in different directions; about 2in. wide and quite clear near the nest, but they faded away as they travelled further away. There were no feathers in the nest." The cry is described as "a booming call which came from the vicinity of the nest—answered in a similar manner by another bird further down the valley. The calls averaged from fourteer to sixteen distinct booms starting quietly and reaching a crescendo at the seventh boom." George Guy tells me that Mrs. Guy some years ago "saw a kakapo when travelling by night from Lake Manapouri to Doubtful Sound. The bird appeared in the pathway, in dense bush, and when a torch was shone on it, the bird slowly walked off."—(R.J.S.)

EASTERN ROSELLA (Platycercus eximius).—Bethell's, November, 1950, eight in flock.—(R.V.R.) Karekare, 14/7/51, c. 20; Huia, 18/8/51, two.—(N.M.) Orere, Clevedon, 30/8/50, two reported seen.—(H.R.McK.) During the past year this bird has neither been heard nor seen in the garden nor on walks in the Reservoir Reserve, Dunedin; several reports received that the birds have been netted for cage birds.—(I.T.) July, 1951, has returned to Maori Hill Reservoir Reserve, from which area it had disappeared after caging operations over a year ago.—(E.M.M.)

SHINING CUCKOO (Chalcites lucidus) .- Mangawhai, first heard this season, 2/10/51.-(L.W.) Great Barrier, 13-22/11/50, well dispersed throughout the island .--- (J.C.D. and B.D.H.) Muriwai, visit only on 27, 28, 29/1/51, a full song each day, downward notes added .--(H.R.McK.). Remuera, Auckland, 23/11/50, at 11 p.m. heard to call continuously, twice 95 upward notes and once about c. 45.-(J.C.D.)-Clevedon, 3/1/51, last song; 23/2/51, one seen.-(H.R.McK.) Norta Road, Clevedon, 7, 10/3/51, latest calls heard.-(A.J.G.) Moumoukai, Clevedon, 18/9/50, first song .- (J.W. St.P.) Minginui, Nov., 1950, to June, 1951; Nov., up to eight seen per day, singing in parties; Dec., up to ten seen; Jan, less seen, but many heard; Feb., only odd ones seen, song decreasing; March, none.—(R.St.P.) Waikanae, 30/9/51, first call of season.—(W.K.) First heard in Wadestown, 22/9/50.—(R.V.R.) Brothers Is., Cook Strait, 24/9/51, one found near tower in bedragglea state (thick drizzle), released next morning, flew away strongly northwards .-- (J.S.) Nelson City, 20/9/51, heard first song, 10.30 hours, bright sunny day, also reliable report of having heard song in Nelson City on 18/9/51.-(L.G.) Anderson's Bay, Dunedin, 25/9/50, heard.-(M.A.E.B.) Kaka Point, 20/10/50, first calls.—(M.P.F.) Lower Tatieri Gorge, 3/3/51, one seen.—(J.G.) One heard calling near river flats in the lower part of the Hidden Falls River, 29/12/49; heard calling near Barrier Hut, Pyke Valley, 31/12/49.--(W.A.W.) Report from Sullivan Dam, Leith Valley, heard 8.30 a.m. and again 3 p.m. 25/9/50; our garden, Maoru Hill, 27/9/50; heard garden 13 days in October; daily in November and occasionally seen; recorded 16 days in December; heard daily January 1 to 7 and not heard again; one seen in garden, 14/3/51.—(I.T.) Glen-leith, Leith Valley, 26/9/50, calls 4.5 p.m.—(W.H.D.) Opoho, 14/10/50, heard.—(Miss I. McArthur, D.N.F.C.) Howick, Auckland, 6/10/50, heard -(Miss I. T. Currie, D.N.F.C.) Leith Valley, five calls and about 15 second later the end notes, 2/1/51.-(W.H.D.) Stirling, 30/1/51, one seen during strong northerly on hawthorn tree in shelter of house; seemed to be devouring the green berries; only one seen this summer; none heard.-(R.V.McL.)

LONG-TAILED CUCKOO' (Eudynamis taitensis.)—Howick, 15/4/51, one in macrocarpa tree in garden.—(N.M.) Minginui, 26/10/50, first call; Nov., 1 or 2 seen each day; Dec., up to four; Jan., down to one some days; Feb., very few; March, none.—(R.St.P.) Whakatane watershed, Urewera, 8/3/51, one heard.—(T.S.) Twice seen and commonly heard, Arthurs Pass, $9\cdot13/1/51$.—(E.W.D.) Westland, Feb., 1951, common from Lewis Pass to Fox Glacier.—(G.G.) Morrison's Creek, Leith Valley, 18/11/50, one heard and seen.—(J.G.) One calling on west side of Alabaster Pass, N.W. Otago, 30/12/49.—(W.A.W.) Titiroa Ranges, Dec., 1950, heard occasionally.—(C.E.T. and J.S.E.)

MOREPORK (Ninox novaeseelandiae) — Little Barrier Is., 11/11/50, bird sitting on nest in hollow puriri near house; 21/11/50, one egg hatched; part of a rat seen in nest; C.H.P. reported second egg had hatched later.—(C.H.P., W.P.M., J.W.St.J. and H.R.McK.) Mt. Moehau, May, 1950, several heard.—(J.S.E.) Hunua, 9/4/51, none recorded last two years.—(D.N.L.) Kopane, Palmerston North, in this district the morepork feeds mainly on the introduced house sparrow. I have seen the owls actually taking sparrows in the grey dawn.—(E.D.) First record this year of morepork in Wadestown, 17/3/51, as it was mobbed by small birds.—(R.V.R.) Lake Brunner, 3/6/51, heard.—(W.C.C.) Recorded Maori Hill on following dates: 10 and 16/6/50, 3/7/50, 24/7/50, 6 and 26/8/50, 12/9/50, 17, 18, 19/10/50, 1/6/51.—(I.T.) Calling, Lake Te Anau, near Głow Worm Caves, 26/3/51, and Milford Sound 27/3/51.— (K.V.F.) Two calling at junction of Pyke and Olivine rivers, N.W. Otago, 30/12/49; heard at Upper Pyke Hut, Pyke Valley, 31/12/49, 1/1/50.—(W.A.W.) Titiroa Ranges and district, Dec., 1950, heard occasionally.—(C.T.B. and J.S.E.)

LITTLE OWL (Athene noctua).—Commonly heard at night in parks and gardens in central Christchurch.—(E.W.D.) Hilderthorpe, N. Otago, 14/3/50, harrier seen eating remains of one; 5/4/51, one heard, seen 10.45 a.m., not so plentiful.—(C.W.McL.) Recorded garden, Maori Hill on following dates: 26/7/50, 27/8/50, 21/4/51, 3, 7/5/51.—(I.T.) About 5 p.m. on tree in Museum Reserve, Dunedin, 25/6/51.—(K.P.S.) KINGFISHER (Halcyon sanctus).—Great Barrier, 13-22/11/50, very

KINGFISHER (Halcyon sanctus).—Great Barrier, 13-22/11/50, very common all over the island, even in the deep bush and at the top of Mt. Hobson (2038ft.).—(J.C.D. and B.D.H.) Minginui, Nov., 1950–June, 1951, Jan., up to nine seen each day, then declining to odd occurrences; Jan., feeding beetles to young; they come here to breed but must winter in lower warmer country.—(R.St.P.) Nest on Flat Is., Hauraki Gulf, 6/1/51, 150 feet above sea level on steep cliff face; three young, within a few feet of the nest of a blue penguin and a petrel. Nest containing three young and number of dead lizards six feet above high water in Katherine Bay, Great Barrier Is.; kingfishers abound in Katherine Bay.— (R.V.R.) Fletcher's Bay, Coromandel, May, 1950, several seen with skinks.—(J.S.E.) Christchurch Botanical Gardens, 23/6/51, three (E.W.D.) At Owaka, one chased by six sparrows, Feb., 1951.—(Mrs. J. A. Moore, D.N.F.C.) Between Portobello and Macandrew's Bay, 9/6/51, six.—(Miss I. McArthur, D.N.F.C.) Stirling, sometimes seen; 14/4/51, seen in orchard fighting with blackbird, driven off, not seen again.—(R.V.McL.) Spit, Otago Heads, 8/4/51, two birds on wires, one a very bright yellow instead of buff.—(L.E.W.)

RIFLEMAN (Acanthisitta chloris).—Minginui, 14/12/50, four, the only ones seen in lower country; up to 24 seen on trips to high country.— (R.St.P.) Nelson Reservoir to Dun Mt., 15/4/51, 15 seen, 30 plus others heard.—(R.B.St.P.) Lake Guyon, 3/1/51, very common in beech forest.—(W.C.C.) Seen once and often heard, Edwards River, Arthur's Pass, 6.8/1/51.—(E.W.D.) Geraldine Hill bush, 16/1/49, eight; Waihi Gorge bush, 21/1/49, 22 (in numbers one to four, some young).— (D.N.F.C.) Dunedin: A pair searching for a nesting site in garden late July and August, 1951. Last season was the first for several years that a nest had not been located in the garden.—(E.M.M.) Numerous along the edge of the beech forest beside the river at Cascade Creek, 29/3/51. —(K.V.F.) Several heard in bush in lower part of Hidden Falls River, 29/12/49.—(W.A.W.)

N.Z. PIPIT (Anthus novaeseelandiae).—North Road, Clevedon, 24/11/50, nest, two eggs; 12/12/50, nest, three eggs.—(A.J.G.) Miranda, 30/12/50, nest, two eggs.—(N.M.) Karori Cemetery, Wellington, 23/10/50, one on tombstone.—(A.A.B.) Lake Brunner, 2/6/51, six.— (W.C.C.) Hae Hae Te Moana Gorge, 17/1/49, five in two miles.— (D.N.F.C.)

FERNBIRD (Bowdleria punctata).—Ruakapa, 13/2/51, one seen at least two others heard, in lupin on sand dunes.—(N.M.) Great Barrier, 14/11/50, heard and seen in Kaitoki swamp.—(J.C.D. and B.D.H.) Minginui, Nov., 1950, to June, 1951, one to four often seen; 12/5/51, 12 seen; as usual with this species, many more heard than seen.—(R.St.P.) Tauranga Harbour(near), Jan., 1951, many; also in swamp in hills, 12 miles away.—(A.S.W.) Lake Taupo, eastern, 30/10/50, several heard. —(R.H.D.S.) Wairarapa Lake, N. end, 23/10/49, heard.—(R.H.D.S.) Mr. James A. Sinclair, Deadman's, Lake Te Anau, states that the fernbird is present at the barrier in Pike Valley. He has seen three specimens which frequent one locality and are very tame. Reported to me by H. D. Skinner.—(R.A.F.)

GREY WARBLER (Pseudogerygone igata).—c. 20, Reservoir Reserve, Dunedin, 13/6/50; c. 30 of a mixed flock of grey warblers and brown creepers. Birds began to disappear before counts of the separate species could be taken, but they appeared to be about even, 17/6/50. On 12/14/51, heard and seen in nine localities in the Reservoir Reserve, c 50 plus.—(I.T.) Stirling, 18/2/51, young one in orchard; 0/4/51, halfsong or squeaks; 19/4/51, full song.—(R.V.MeL.) Three or four singing near flats in lower part of Hidden Falls River, 29/12/49.—(W.A.W.)

YELLOW-BREASTED TIT (Petroica m. macrocephala).—Nelson Reservoir to Dun Mt., 15/4/51, six seen (one female), ten others heard. —(R.B.St.P.) Lake Brunner, 2/6/51, three; Anti-Crow Hut, Upper Waimakiriri Eiver, 11/5/51, six plus.—(W.C.C.) Okuku Pass, Mt. Grey, 18/8/51, one.—(D.E.C.) To Moana Gorge, 17/1/49, seven males, songs heard in other localities; Waihi Gorge, 21/1/49, two females and three males, on of latter young; Lynn Creek, Mt. Peel, 19/1/49, two males, one female.—(D.N.F.C.) Hilderthorpe, N. Otago, 9/1/49, one seen within 3ft., had pure white breast.—(C.W.McL.) Song, Ross Creek, Wakari Road, 16/8/50; song, Reservoir Reserve, 12/9/50; male flew in front of car on road, Akatore to Waihola, 21/11/50; song, Glen Leith, 6/1/51; song from trees in garden, 9/3/51; female seen in garden, 20/3/51; three males seen, Reservoir Reserve, 12/4/51.—(I.T.) Trotter's Gorge, 11 males, one female, 27/3/51; Waipori Gorge, seven males, one female, 1/4/51.—(I.T., L.E.W.) Lower Taieri Gorge, four males, 3/3/51.— (K.V.F., I.T., L.E.W.) On flats in lower part Hidden Falls Valley, 29/12/49.—(W.A.W.) Titiroa Range, Dec., 1950, frequently seen.— (C.B.T., J.S.E.)

PIED TIT (P. m. toitoi).—Waitakeres, 26/3/51, one heard at Dreamland.—(R.B.S.). 15/5/51, two singing, Huia Valley.—(K.C.B.C.) 7/7/51, one at Cascades.—(N.M.) Minginui, Nov., 1950 to June, 1951, up to seven daily at bush workings; up to 28 on trips to deep bush and high country.—(R.St.P.) Mt. Moehau, May, 1950, one seen at 1200ft.— (J.S.E.) South of Atiamuri, in pinus insignis forest, 30/10/50, male heard.—(R.H.D.S.)

ROBIN (Miro australis).—Minginui, Nov., 1950, to June, 1951, two usually follow the bushmen or logging tractors. Many in the higher beech country and in the dark gullies of the wilder parts. In the first hour's walk up a tributary of Waiau, I saw 18.-(R.St.P.) Bush near Tauranga, Jan., 1951, one seen.—(A.S.W.) Nelson Reservoir to Dun Mt., 15/4/51, two seen, two others heard.—(R.B.St.P.) Travers River, 7/1/51, two.—(W.C.C.) Rahu Saddle, Feb., 1951.—(G.G.) Plentiful Piano Flat, Waikaia Valley, and in the bush between the valley and Titan Rocks, 1 to 7/1/50.—(E.M.M.) Titiroa Ranges, Dec., 1950, five or six seen in three days; present in beech forest along Waiau River, very friendly.— (C.B.T. and J.S.E.)

FANTAIL (Rhipidura fuliginosa).—Howiek, one pied flew into house during day and stayed in all night, appeared not to be able to see in dark or half-light as it was handled easily then. Slept with head tucked into wing, 30/5/51.—(N.M.) North Road, Clevedon, 9/11/50, one pied flew round and round a shining cuckoo, then pursued it when it flew.— (A.J.G.) Minginui, 1950-51, plentiful; none of the black phase seen here.—(R.St.P.) Nelson Reservoir to Dun Mt., 15/4/51, 20 seen; only one black.—(R.B.St.P.) Very common abount Aranui School, Christchurch, June, July, 1951.—(W.C.C.) Geraldine district, Jan., 1949, count over nine days, 27 pied, seven black, three black seen together in garden.—(D.N.F.C.) Count, June 1, 1950 to May 31, 1951: Garden, Maori Hill, pied 101, black 32; outside of garden, pied 75, black 15.—(I.T.)

WHITEHEAD (Mohoua o. albicilla).—Little Barrier Is., 12-25/11/50, three nests found, one with three addled eggs, one with four eggs, only one of which hatched, chick leaving nest safely; one with two eggs, which hatched, but the chicks died in the nest when 12 days old.— (C.H.P., J.W.St.P., W.P.M. and H.B.McK.) Minginui, Nov., 1950 to June, 1951, up to 40 seen daily; in high back country up to 400 daily. From 23/1/51, seen feeding flying young.—(R.St.P.)

BROWN CREEPER (Finschia novaeseelandiae).—34 in flock before a snow fall Anti-Crow Hut, Upper Waimakiriri River, 12/5/51.—(W.C.C.) Reservoir Reserve, Maori Hill, mixed flock creepers and grey warblers, c. 30, 17/6/50; pair Ross Creek Track, 16/8/51; heard three localities, Reservoir Reserve, 12/9/50; Akatore, 19/9/50; calls, Botanic Gardens, 20/10/50; six times during March, 1951, heard or seen, sometimes in little flocks in garden.—(I.T.) Pair, Woodside Glen, repeated song as if nesting, 23/9/50; flock, bush, Fish Hatcheries, Waitata, 21/4/51.— (D.N.F.C.) Lower Taieri Gorge, 3/3/51, small flock.—(O.R.C.)

SILVER EYE (Zosterops lateralis).—Moumoukai, Clevedon, 1951, winter, several flocks of up to 50, a good increase from last year.--(J.W.St.P.) Minginui, Nov., 1950, to June, 1951; Nov. to Feb. small lots in lower country, average 10 per day. March, some increase in lower area and flocks in high country, up to 250 birds seen in one day. In April and May the lower increased to a maximum of 300 in one day though many remained in the high country. On June 23rd the bushmen reported many hundreds which had apparently been driven from the heights by a cold S.E. gale. In greater numbers and in better condition than in the winter of 1950.—(R.St.P.). Thirty-five plus in flock, Lake Brunner, 3/6/51.—(W.C.C.) Hilderthorpe, N. Otago, feeding at table, 28/3/49, two; 10/4/49, five or six; 12/4/49, 30; June, 1949, 200 to 300; 21/7/49, 30; 10/9/49, many; 20/4/50, 12; 7/7/50, 200 to 300; 23/7/50, 12; 7/8/50, 20 to 30.—(C.W.McL.) June, 1950, the largest number of silvereyes ever known constantly about the garden; rough estimates (accurate counts impossible) on and about bird tables and nearby trees, 50 to 100; largest consumption of syrup ever recorded, 16½ quart bottles being the peak on June 24, 1950. Absence of berries on native trees and shrubs. (June, 1951, peak so far this year, 3½ bottles).—(I.T.)

TUI (Prosthemadera novaeseelandiae).-Little Barrier Is., 15/11/50, one out of nest; up to 24/11/50, large young about to leave nest in high macrocarpa. Many birds feeding chicks in nest. The greatest number of breeding birds apparently start laying at about the same time .--(C.H.P., J.W.St.P., W.P.M. and H.R.McK.) 25/5/51, one at Middlemore; mid-Sept., two on kowhai on Mangere Mt.; uncommon immediately to the south of Auckland.-(K.C.B.C.) Howick, 30/6/51, seven in garden. usually two or three.—(N.M.) North Road, Clevedon, 27/1/51, two eating laurel berries in garden.—(A.J.G.) Minginui, 1950-51, fairly eating laurel berries in garden.-(A.J.G.) regular, up to 40 seen in one day, average about 20. On deer-stalking trips to Whirinaki, up to 500 seen in one day. Strangely enough, none in autumn on the Waiau Stream or its tribultaries, though plentiful in the lower bush and on top of the ranges. Feeding notes: Oct., on kowhai; Jan., chasing and catching cicadas; March, April, May, on fruit of rinu and kahikatea. The kahikatea crop was the heaviest for years, the branches bending with the weight of fruit. On June 24th practically all of this temporary population, numbering many thousands, moved off south-west. A bush hawk appeared in Feb. but left owing to its being chased frequently by parties of 15 to 20 tuis.—(R.St.P.) Kairimu Road, Marakopa, at least five pairs on farm (includes three small patches of bush), breeds.-(R.E.W.F.) Lake Brunner, 2/6/51, two.-(W.C.C.) Okute Valley, one; albino tui observed in bush behind Akaroa township by C.

Holmes, 10/5/51.—(D.E.C.) Geraldine Hill bush, 16/1/49, two.—(D.N.-F.C.) Maori Hill, 21/2/51, young tui flew upwards about 3ft. and caught white butterfly passing over its head, brushed it against bough before eating it.—(I.T.) On the edge of the bush, Swampy Hill, Dunedin, 6/5/51, 10 to 12, the largest record in this area which is often visited.—(E.M.M.) Pounawea, Otago, 13/1/51, four feeding on rata.— (L.E.W.)

BELLBIRD (Anthornis melanura).-Little Barrier Is., 14/11/51, no young out of nests; 15/11/51, three chicks left nest in garden hedge; 18/11/51, three other young seen and from then many seen.—(C.H.P., J.W.St.P., W.P.M. and H.R.McK.) Minginui, 1950-51, average of c. 25 seen each day, maximum from Nov., c 40, rising to 60 in April and 100 in June. Hunting trips up Whirinaki River, March and April, max. 500 seen in one day. Great numbers feeding on rimu and kahikatea fruit March, April, May. Did not leave in June as they do not migrate so much as the pigeon and tui. Fledglings left the nest in January .--(R.St.P.) Lake Tarawera, 26/2/50, very abundant especially around the landing and at the outlet.—(M.J.S.B.) Mokoia Is., Rotorua, 4/2/51, one auditory record.—(M.J.S.E.) South of Atiamuri, in pinus insignis forest, 30/10/50, heard.—(R.H.D.S.) First one seen in my garden at Castlecliff this winter on 21/5/51; not many about Castlecliff this winter. Castlechi this winter on 21/5/31; not many about Castlechi this winter. --(W.P.M.) Nelson Reservoir to Dun Mt., 15/4/51, ten seen, 100 plus heard.--(R.B.St.P.) Anti-Crow Hut, Upper Waimakiriri River, 10/5/51, nine; Lake Brunner, 2/6/51, three; Lake Guyon, 3/1/51, two.--(W.C.C.) Okute Valley, 10/12/51, six.--(D.E.C.) Geraldine district, Jan., 1949, frequently heard or seen.--(D.N.F.C.) During June, 1950, counts of five to eight common, once c. 15. First young in garden, November 14. February, 1951, notes, male, female and young frequent; March, songs of females as frequent as those of males.—(I.T.) Stirling, 14/6/50, two at honey-water jar, one chased other away all day. This went on for a few days, till 20/6/50, when big one allowed other to drink. June, 1951, one comes, first visit, 5/5/51.—(R.V.McL.) Two bellbirds noted on a power wire, Blacks Road, Opoho; one had a straw in its beak and the other pecked at the straw. Did some snuggling together, caressing and playing with the straw. The one with the straw flew away and was followed by the other bird.—(W. W. McArthur, D.N.F.C.) Pounawea, Otago, 13/1/51, several feeding on ratas.—(L.E.W.)

BLUE-WATTLED CROW (Calleas wilsoni) .-- Upper Ness Valley, Clevedon, 6/1/51, one seen, calling quietly as if to a mate; rarely seen here.-(R.J.F.) Moumoukai, Clevedon, 1951, winter, several heard each time I go through bush, especially about Mt Kohukohunui; 1/7/51, Mr. F. Gibbons heard three or four singing in the Hunua Bush.-(J.W.St.P.) Pongakawa district, 3½ miles from Rotochu, my nephew tells me they are still to be heard here; he recently recorded seven in the one day.— (A.H.W.) Near Tauranga, Jan., 1951, two reported seen in bush area. -(A.S.W.) Mr. R. D. Larritt, Frankton Junction, reports, 1/8/51:--—(A.S.Ŵ.) -(A.S.W.) Mr. K. D. Larritt, Frankton Junction, reports, 1/8/91:-"While deer-stalking on the Marapara Mountain (between lakes Rotoiti and Rotoehu next to Hongi's Track) I noticed two birds. I stood still and watched them, being keen to get a good look since I had not seen their like before. They were in size about half-way between a black-bird and a pigeon; their colour was a steely grey not unlike the colour of the ink that I am using to write this letter, perhaps a little darker. Their beaks were as far as I can remember (it was a dull day in virgin hurch last Foster) were black and an inch to one and a helf-inches lange bush last Easter) were black and an inch to one and a half-inches long. They came right down to within about 8 or 10 feet and we had a good look at their movements in the wineberry and supplejack. They were quite quick in their movements. They would run quickly along a branch or twig and seemed to hop from branch to branch; when running along a branch they reminded me of a parrot but the movement was much quicker. They made no sound and left us after they had had a good look. I believe they may be a very rare native crow."-(R.A.F.) Toa Toa district, Bay of Plenty, 1951, specimen brought to Opotiki.-(J.D.C.) GREENFINCH (Chloris chloris).—Minginui, Nov., 1950, to June, 1951, Nov. to March, very small lots; April, starting to flock; May, flocks of e 200 and up to c 450 seen in one day; June, up to 600.—(R.St.P.) Maori Hill, six or seven feeding on chickweed, 27/8/50; calling commenced 1/11/50; February-May. This season daphne berries ripened and fell. This is the first time for years that greenfinches have not stripped the shrub before the berries had time to ripen.—(I.T.)

CHAFFINCH (Fringilla coelebs).—Clevedon, April-May, 1951, feeding on seeds of flax (Phormium tenax) by holding seed in bill and shaking the wings from it.—(H.R.McK.) Minginui, Nov., 1950 to June, 1951, mostly on pumice flats, especially among the self-sown hawthorn trees; Nov. to Jan., small lots, but up to 50 seen in one day; Feb., flocking commenced, lots of 60 to 100 in old timber workings; March-June, flocks of c. 200 and up to 500 seen in one day.—(R.St.P.) Nelson City, last song heard 4/4/51; first full song for season heard 4/8/51; singing general by 8/8/51.—(L.G.)

REDPOLL (Carduelis cabaret).—Waerenga, during August and September, 1949, huge flocks of redpolls frequented young grass to feed on small "water grass" growing on ridges, but none remained by November.—(M.P.D.) Minginui, Nov., 1950 to June, 1951, very patchy in numbers; a few large flocks in autumn.—(R.St.P.) Atiamuri, 30/1/49, on the high ground before reaching the bridge a small flock of c 11 seen. —(M.J.S.B.) Northland, Wellington, last seen 16/10/50; four seen day I returned from H.B., 24/8/51; maximum, 25, on 24/9/51; last seen, 1/10/51.—(A.A.B.) Thousands on Balmacewan golf links, 18/6/50; lawn had just been sown.—(LT.)

GOLDFINCH (C. carduelis).—Howick, from 26/1/51, to c 9/4/51, flocks of from 4 to 50 juveniles came every morning to feed on scabious, cornflower, golden rod and zinnia seeds. At first they had no red on heads, but by 3/3/51, they were starting to attain the scarlet colour of adult birds.—(N.M.) Moumoukai, Clevedon, July, 1951, flocks of up to 100 seen, only odd small lots earlier.—(J.W.St.P.) Minginui, Nov., 1950, to June, 1951, usually scarce, but odd flocks of up to 200, once 500.— (R.St.P.) Nelson City, first full song heard, short bursts of song from bird sitting on telegraph wires. Winter flocks have not broken up yet; 17/9/51. Birds are paired up by now, 5/10/51.—(L.G.)

SPARROW (Passer domesticus).—Takapuna, 16/7/51, G. E. Minhinnick reported seeing sparrow chasing a red-billed gull.—(N.M.) Minginui, Nov., 1950 to June, 1951, 100 to 500 seen daily. Flocks noted to be living in open country far from houses. Seen to take cicadas. Increasing fast.—(R.St.P.) Dunedin, 28/6/51, buff-coloured sparrow seen, ordinary dark markings replaced by cinnamon, edges of wings and upper side of tail cream coloured, eye light brown. Earlier in breeding season, peculiar young one seen being fed at bird table, probably same bird.—(L.E.W.)

YELLOWHAMMER (Emberiza citrinella).—Little Barrier Island, 11-25/11/51, two or more males about Titoki Point acting as if they had mates sitting.—(H.R.McK.) Eskdale, still singing, full song, 10/2/51; Nelson City, first full song heard 15/9/51.—(L.G.)

CIRL BUNTING (E. cirlus).—Tauranga, Jan., 1951, three seen.— (A.S.W.) Seen Hawke's Bay.—(D.B.) Lincoln, Canterbury, 22/8/50, male.—(L.E.W.)

SONG THRUSH (Turdus ericetorum).—Howick, 14/5/51, first full song, dawn.—(N.M.) North Road, Clevedon, 1/5/51, song commenced.— (A.J.G.) Mokoia Is., Rotorua, 4/2/51, at least four in full song. Last song recorded on Rotorua mainland was 2/1/51.—(M.J.S.B.) Nelson City, first full song, 07.30 hours, 21/3/51.—(L.G.) Hilderthorpe, N. Otago, drinking milk from cat's saucer.—(C.W.McL.) Last recorded song, Maori Hill, 12/1/51; first recorded song, 25/3/51.—(I.T.) Stirling, very plentiful; 21/6/50, song; 5/5/51, full song; several singing throughout May and June.-(R.V.McL.)

BLACKBIRD (T. merula).-Howick, 18/6/51, in full song.-(N.M.) North Road, Clevedon, 5/5/51, first song .-- (A.J.G.) Orakei Korako, 30/1/49, around tea rooms six blackbirds in full song; singing ceased in Rotorua in last week in Dec. Mokoia Is., Rotorua, 4/2/51, at least four singing lustily; last song Rotorua mainland, 17/12/50; a male observed with billful of earthworms.-(M.J.S.B.) Nelson City, first full song heard, still lacking the volume of later season song, but stronger than sub-song and consisting of all the phrases of full song. Delivered from telegraph pole, 17.45 hours 22/7/51; singing is general in the evenings but still weak, 30/7/51.-(L.G.) First recorded song, Maori Hill, 24/7/50. Full, loud, eight-phrase song sung repeatedly at twilight, 12/5/51. On 31/3/51, great chasing about garden; this happens yearly about this date; full song repeatedly about sunset, 19/5/51.—(I.T.) Report of blackbird heard singing during the night in the Taieri, 25/9/50, and heard singing Mornington, 12/6/51.—(Miss T. Jackson, D.N.F.C.) Blackbird with white neck, Ravensbourne, 18/6/51.-(Mrs Campbell, D.N.F.C.) Stirling, very plentiful; 14/4/51, chasing; one attacked kingfisher; 2/6/51, weak song at sunset while at least four thrushes singing loudly; 23/6/51, distinct song at dawn; 30/6/51, quiet song several times while two thrushes sang loudly, sunset.—(R.V.McL.) Dunedin, nesting in garden, and on 10/10/50 hen bird flew out of nest and dropped a dead baby bird at my feet, stood and watched till I picked it up, when she immediately began to feed. First whisper song heard in garden on 23/5/51 and louder whisper song on 29/5/51. On 25/3/51, a male bird executed a dance round and round a currant bush, after a brief rest resumed the dance, repeated several times.-(L.E.W.)

HEDGE SPARROW (Prunella modularis).—Hora Hora Islet, off Waikeke, 14/10/50, one singing in taupata scrub.—(H.R.McK.) Minginui, Nov., 1950 to June, 1951, up to six in one day in summer and up to 35 in autumn.—(R.St.P.) Song recorded 17/6/50, but daily singing not commenced until end of July. January 13, 1951, last recorded song of season.—(I.T.) Stirling, 28/6/51, one singing; 1/7/51, two sang alternately in orchard, mid-day.—(R.V.McL.)

SKYLARK (Alauda arvensis).—Nelson City, lark singing on wing, mid-morning, 11/8/51; cold but sunny, quite long bursts of song as it flew overhead and continued until out of sight. This was not territorial soaring flight, but rather song on the wing as the bird moved from one locality to another; similar occurrence 15/8/51.—(L.G.) Increasing again at Waitahuna, where they had for some time been scarce, Jan., 1951.—(Miss A. Clancy, D.N.F.C.) Stirling, 18/4/51, singing.— (R.V.McL.)

STARLING (Sturnus vulgaris).—Minginui, Nov., 1950 to June, 1951, Nov. up to 250; Dec., 400; Jan., 300; Feb. 9; March, 70. but two lots of 800 and 500; April, 30, but one lot of c 4,000; May, 80, but two lots of c 1000 and one of c 4000; June, 80 and one lot of c 1000. The large flocks seemed to be distinct from the usual population from March to June. In March and April they fed on kahikatea and rimu berries and on grass-grubs on the flats. When they moved the roar of their wings was audible for a quarter of a mile.—(R.St.P.) Dunedin, starling seen to pick up a sparrow; shook it, jerking it about five times; when released the sparrow fell to the ground where it lay with wings outspread as if stunned. It was some minutes before it recovered sufficiently to be able to fly to cover; 16/6/51.—(Miss J. Stewart, D.N.F.C.) Stirling, 22/2/51, large flock flying west across farm; 5/5/51, hundreds on belt of hawthorn trees, towards sunset, singing; flew on towards night roost.—(R.V.McL.) Interest in sparrows' old nests resumed 3/9/50. Maori Hill; young paid first visits to bird table, 22/12/50. May, 1951, starling for the first time seen eating apples from the trees in garden. —(I.T.) MYNA (Acridotheres tristis).—Howick, 17/3/51, eight in garden; now plentiful.—(N.M.) Lake Rotorua, 8/11/50, single bird seen at the six-mile peg, Rotorua-Tauranga main highway.—(M.J.S.B.) 2/1/51, on a drive from Te Karaka to Hexton counted 150 on the road.—(C.K.W.) Feilding, 1951, at least five pairs in business area.—(E.D.)

WHITE-BACKED MAGPIE (Gymnorhina hypoleuca).—Karaka, 23/7/51, one, casual.—(D.A.U.) Ruatoria district, they arrived in this district in about 1933; now numerous and appear well settled.—(C.K.W.) Geraldine district, heard from dawn till dusk, so common that only flocks over 20 were recorded. On Jan. 17, near Te Moana, a flock of 30 to 40; Jan. 28, near Kakahu, flock of 28.—(D.N.F.C.) Stirling, none in district.—(R.V.McL.) For some years usual to see about half-dozen at Morrison's, near Dunback; seen 10-15/1/51.—(F.R.B.)

BLACK-BACKED MAGPIE (G. tibicen).—Between Dannevirke and Woodville, 13/11/50, 1; Martinborough, 5/9/51, one.—(J.M.C.)

MAGPLE (Gymnorhina ? sp.)—Parakai, near Helensville, 9/7/51, one with black band across upper back.—(R.B.S.)

HERONS IN CANTERBURY.

By H. Barker, Kaiapoi.

A waste of mud, water and rushes and a flooded gateway, and on either of the gate's two supporting posts, a heron—pale greyish blue, almost white—very upright, tall and slender, with head well back and long necks curved forward.

They regarded my approach with more curiosity than alarm, and from a distance of about thirty vards I was able to watch them as they stood motionless like two exquisite figures in porcelain. This was my first view of these unusual visitors to my farm at Kaiapoi, and incidentally the only time they allowed me to approach them closely. We have been long familiar with both the blue and white herons, but these birds were obviously different, and it was some time before I was able to identify them as the white-fronted heron (matuku moana) a species of which I had never heard before in this district.

This was February 25, 1951, and for several days these birds were a familiar sight as they waded, fishing in the shallow waters of the swamp; and then they were joined by two more. After that, progress was rapid, and by March 15 there were eleven. The whole family was interested by this time, and competition was keen in establishing a new count, which was not hard to do as they kept on coming. By the end of March there were thirty-six—but that seemed to be the limit.

Owing to the very wet summer, the fields were all more or less flooded, and everywhere there were countless thousands of frogs (they even invaded the house at night if the doors were left open) and every pool and every puddle was soon swarming with tadpoles, so even when our thirty-six herons were joined by three white ones, the food supply was almost unlimited. The herons seemed to make our swamp their headquarters, and in the mornings could be seen flying off in groups to prove the surrounding country. Their habits seemed quite regular. In the morning, just before sunrise, they would come up from the swamp and settle along the tops of a row of tall pines close to the house. Thero, in the first rays of the sun, they would make a leisurely toilet, preening their feathers and sunning themselves for about half an hour, then, in small groups, would drift off to an adjacent pond to wade and play for an hour or so before moving further afield. In the evening the same order was observed, and we used to watch about half an hour before sunset for them coming in to perch on the tree-tops in the last sunlight, and carefully order their toilet before dropping down to their roosting places in the bare branches of a row of scraggy willows. This procedure seemed never to vary, except that on wet days they did not linger so long on the pine trees.

The first birds to come, being very light in colour, were apparently young ones, but later they appeared in all stages of plumage, from almost white to slaty-blue, but all with the characteristic white strips on the face. Unlike the blue heron, which always seems a dolefu, solitary bird, they seemed a happy and playful crowd, and would spend hours chasing one another and twisting and tumbling in the air. This was particularly noticeable on wet or misty days.

They became more timid as their numbers increased, and although I tried many times to obtain a photograph of them, it was without success, as there always seemed to be a sentinel posted in some prominent place to give warning of my approach.

About the middle of June we had a series of severe frosts which covered the pools with thick ice, and it was amusing to see them all sitting along the sunny side of the trees, while at intervals, two of their number would fly down and hover, like helicopters, over the water, and then fly back to report "Water still unfishable." However, this was evidently too much for them and they moved off after a sojourn with us of almost four months.

The white ones were evidently made of sterner stuff, as they stayed on for another three weeks, their number by this time having increased to five; and five white herons sitting on the sunny side of a green pine tree is an unforgettable sight.

KING SHAG IN MARLBOROUGH SOUNDS.—During a dredging expedition on m.l. Alert from 29/8/51 to 2/9/51, the following observations were made by R. K. Dell, C. A. Fleming and J. Moreland:—White Rocks, 31/8/51: About 70 birds, including several flying immature, very timid, none on nests; a few new nests visible were further west on ledge than in 1950. Stack, off Forsythe Island, 1/9/51: On penultimate of chain of stacks off west side, Forsythe Island, on a south-facing ledge, about 150 adults, 29 nests with young in various stages of down. No brown flying young seen. North Trio, 1/9/51: 95 to 110 birds including 18 feathered young which may not have been flying as they remained when the rest flew at approach of the vessel. Fifteen nests visible on slope. The Sentinel was not visited.

OCCURRENCE OF THE BROLGA (Megalornis rubicundus) in New Zealand.-From March to May, 1947, a large bird was seen and heard in the vicinity of Clevedon by more than 80 people. From a study of all reports, and comparison with museum specimens of a feather found, it is concluded that the bird was a brolga (Megalornis rubicundus). The feather appeared to be abraided at the edges in a manner suggesting it had come from a captive bird, but this damage had apparently occurred in the removal of the feather from the mud, into which it had been trampled by a cow. The brolga, a native of Australia, is frequently kept in captivity there, but careful inquiries have not revealed the presence of any of these birds at any time in New Zealand. Whether the occurrence of the bird, which has not hitherto been recorded in the country, can be accepted as a valid addition to the New Zealand list, will be a matter for the Checklist Committee to decide. Full details of the occurrence were published by us in "The Weekly News," July 18, 1951, page 38, "Mystery Bird Puzzles Observers-Australian Brolga Visits Auckland District.",-(H. R. McKenzie, Clevedon, and J. M. Cunningham, Masterton.)

REDPOLLS LEAVING NEST .- On January 5, 1951, a nest of redpoll (Carduelis cabaret) was found in a fork of an old apple tree about six feet from the ground. It contained five partly-feathered young which completely filled the nest. The nest was partly in the sun. The weather being very hot, the chicks gaped in the heat and hung their heads over the side of the nest with their red mouths wide open. On January 10 and 11 they were very restless, wriggling, preening their feathers and scratching their heads on which there was considerable down. They were now pretty brown-flecked chicks. On January 12, they were still very restless. At about 11.10 a.m. one chick suddenly flew from the centre of the nest, landing on a plum tree about 20 feet away. Three minutes later another flew from the centre of the nest to a raspberry cane about 14 feet away. These two flew upwards and then horizontally. One of the remaining three in the nest now climbed out on to the side of the nest where it sat for a while. Then it made its way to a branch behind the nest. After stretching and preening for a while, it returned to the nest. Out again it went to the branch, and after more stretching and preening, flew to an apple tree about 30 feet away. The last two sat side by side in the nest for some time. Presently they clawed their way up the side of the nest and sat on the edge. The weaker chick slipped back into the nest, but the stronger climbed on to a branch, where it played and balanced and finally made its way on to another branch. Then, without warning, it flew into the plum tree, landing about the same place as the first fledgling. At 12 o'clock the last chick struggled again to the edge of the nest, where it sat for about 10 minutes looking a scared little bird. Presently it made its way to a branch where it stretched, flapped its wings and preened. At last, about 12.15 p.m., it glided downward to the raspherry canes about 10 feet away.—W. H. Davidson, Dunedin.

REVIEWS.

Taxonomic Notes on the Australian Butcher Birds (family Cracticidae), by Dean Amadon. (Amer. Mus. Nov. 1504.)

In view of the confusion at present existing in New Zealand concerning the taxonomy of magpies having white backs and those having black backs (usually termed **Gymnorhina hypoleuca** and **G. tibicen**) this important paper is of more than passing interest in this country. Much of the text concerns the genera **Cracticus** (the butcher-birds) and **Strepera** (the bell-magpies or currawongs), but the genus **Gymnorhina** is also reviewed.

In the black-backed magpie G. tibicen, both sexes have a band of black feathers across the back, and Amadon tentatively recognises five sub-species, increasing in size from New Guinea birds to the nominate form in New South Wales. He recognises three sub-species of whitebacked birds, G. h. hypoleuca, the small Tasmanian bird; G. h. leuconota of Southern Victoria and South Australia, in both of which the females have the feathers of the mid back light grey margined with white; and G. h. dorsalis (usually given specific status) in south-western Australia. In this the males have white backs and are almost inseparable from leuconota. The colour of the basal half of the outer vane of the outer rectrix does not appear to be diagnostic as there are exceptions to the usual white in dorsalis (and tibicen—J.M.C.) and black in leuconota. Females are different in that they superficially resemble tibicen but may be distinguished by the black feathers of the mid back being margined with white (though Serventy and Whittell state this is sometimes absent).

There is some discussion as to the relationships of these forms, and the evidence for hybridising where the forms overlap. (Many "blackbacked" birds in New Zealand, particularly where isolated among "white-backed" populations, have the black band reduced in width from typical tibicen, as is found also in southern N.S.W. and Northern Victoria, where tibicen and leuconota overlap). "The very fact that

two such distinct forms meet in an area where natural barriers are absent indicates that their differentiation occurred in isolation and that they have recently come into secondary contact with each other. If such is the case, it may well be that some interbreeding occurs but not enough to prevent the further differentiation of the two forms, in which case they would correctly be regarded as distinct species. . . . This greater ecological tolerance of tibicen can be taken to indicate that it is the older form. The plumage sequences, too, favour this view. The white-backed plumage is preceded by dark-backed immature stages and is limited to adult males. . . . Analysis of measurements of tibicen and leuconota favours the view that they are conspecific. . . As regards the relationship of leuconota and dorsalis, the fact that the males can be differentiated only by slight average characters suggests conspecificity. The difference in the females, while quite sharp, is one of degree. Both have the feathers of the back margined with white, but in leuconota the centres of the feathers are grey, in dorsalis black. . . It is quite likely that future field work will show that all forms of Gymnorhina are conspecific, especially since they are all said to have similar habits. . . . At present it would be premature to unite the white-backed and blackbacked magpies."-J.M.C.

The British Trust for Ornithology; Seventeenth Annual Report, 1950. Price, 1s. 6d. (Address: 2 King Edward Street, Oxford.)

As a focal point of ornithological investigation and research in Britain, the British Trust for Ornithology performs an increasingly important role and a perusal of this 40-page report gives impressive evidence of the work being accomplished. The contribution of the late B. W. Tucker, one of the founders of the Trust, is acknowledged. The membership of this trust shows an increase, field investigations have been well supported and more birds were ringed in 1950 than in any previous year. Among the inquiries was one on paper-tearing by birds and it is recorded that in 1950 there was no renewal of the "sensational attacks on fabrics of all kinds reported in 1949." Excellent work was accomplished at the various bird observatories. For those who wish to keep themselves informed of what is being done in the ornithological world in Britain, a copy of this report is essential.-(R.H.D.S.)

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SCIENTIFIC NAMES.

Except in the case of those given below, the scientific names of species men-tioned in the text will be found in the summarised classified notes:---

Ibis, Glossy (Plegadis falcinellus). Shag, Black (Phalacrocorax carbo). Shag, Pied (Phalacrocorax varius)

Shag, King (Leucocarbo carunculatus) Swift, Spine-tailed (Hirundapus caudacutus)

1.

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