- BLACK-BACKED GULL Most stretches of beach now have one or two breeding pairs. They are strongly suspected of drastically reducing the numbers of breeding pairs of Banded Dotterels. At the Kairito Ck. colony of c. 40 pairs, only two nests had clutches of three eggs on 28/10/57; a few had two eggs and several one egg. 28/11/57 was the peak of hatching.
- BLACK-BILLED GULL c. 90 on 29/9/57; 34 on 28/10/57; none noted summering; 60+ including several juv. back on 4/7/58; c. 215 on 8/6/58; 600+ on 26/7/58, some being in a sodden marsh with Red-billed; and later 150+ flew down from inland. This is the first time that Black-billed Gulls have been seen away from the shore on this stretch of coast where hundreds normally winter.
- CASPIAN TERN __ Only a few summered; no evidence of breeding. 120+ on 25/4/58.
- WHITE-FRONTED TERN ___ 28/10/57, some hundreds up and down the Firth. None known to have bred successfully. c. 40 birds present at Kairito shellbank on 28/11/57; and six nests each with one egg. On 30/12/57 this colony was quite abandoned. On 7/4/58 these terns were thinly scattered all along he coast; 220+ on 10/5/58; 8/6/58, c. 175 at Kaiaua.
- TERN (Sp? albifrons/nereis) Small dark-billed terms as described in Notornis VII 174-182 were again recorded on several occasions, viz. 1 on 6/7/57 (N.M.) and 28/10/57 off Kairito Ck.; 2 on 28/11/57; 9 on 30/12/57; 4 on 25/4/58, one showing some yellow in the bill; 4 on 19/10/58 at Waitakaruru. These small terms clearly prefer the muddy Kairito-Waitakaruru reach to the more easily watched Kaiaua-Miranda coast.

__ R.B.S., H.R.McK.

MANUKAU (a) UPPER MANUKAU

- BLUE HERON __ Puhea Ck. is a regular haunt. 3 on 4/5/58 near the bridge.
- S.I. PIED OYSTERCATCHER __ 23 at Tararata Ck. on 16/11/57. BAR-TAILED GODWIT __ Normal numbers during the summer, e.g.,
- 2000+ at Tararata Ck. on 16/11/57; 1500+ at Harania Ck. on 2/1/58. KNOT __ 7 at Harania Ck. on 26/9/57; c. 200 on 16/11/57 was the biggest flock noted during the summer.
- TURNSTONE _ 1 at Tararata Ck. on 16/11/57.
- STILT __ Many non-breeders as usual, were present during the breeding season. The winter population numbered thousands.
- CASPIAN TERN At dusk on 13/11/57, six passed low over Middlemore, having flown up the Tamaki and heading for Harania Ck. into a strong westerly. Caspian Terns also cross the isthmus by a route which takes them from Orakei and Hobson Bay over Remuera to Upper Manukau.
- WHITE-WINGED BLACK TERN One, conspicuous in breeding dress, was found at Harania Ck. on 13/2/58; where it was subsequently watched again on 26/2/58; 5/3/58 and 25/3/58. This is the fourth successive summer that a White-winged Black Tern has assumed nuptial plumage in Upper Manukau. It is presumably the same individual.

MANUKAU ___ (b) PUKETUTU-IHUMATAO

Work on the Auckland sewage scheme has continued in this area; and with the consolidation of a new causeway and sea-wall which links Farm Point with Puketutu Island, a large shallow lake has been formed. In November, 1957, as the flats which were formerly covered twice daily by the tides dried out, the strong stench of dying shellfish and other marine organisms filled the air. During the summer the water-level in the lake sank very low, but eleven inches of rain in February produced conditions which were ideal for many wading birds. The deeper water of the main channel evidently teemed with trapped fish, which attracted large numbers of shags and Caspian Terns,

The number of waders frequenting this corner of Manukau has, if anything, increased; and the changed ecological conditions have been followed by changes in behaviour in some species. The many acres of shell at Chinky Spit are now permanently above water-level, so that the resting places of the waders are no longer dictated by the height of the tides. On some shellbanks a vigorous growth of farm weeds has already begun; but Chinky Spit still remains comparatively bare, and as it is rather inaccessible huge flocks of waders have used it for resting in absolute security. The extensive shallows round the edge of the lake have become a rich feeding ground, independent of the tides. The formation of this lake seems to have made the Wrybills even lazier than they were before in their search for food. During the winter a mixed company of 2000-3000 waders, Stilts, Wrybills, S.I. Oystercatchers, Godwits and Knots, was often scattered around the shallow fringes of the new lake busily feeding; and as the tide ebbed outside the new sea-wall, they were slow to move away. Formerly this corner of Manukau was deserted by Stilts during the spring and up to midsummer; now they are present in hundreds, non-breeders, probably lured away from their traditional summer quarters in upper Manukau.

At the time of writing, another causeway from Puketutu Island towards Ihumatao is nearing completion, so that another square mile of tidal flats will soon be drying out on the south side of the old Puketutu causeway, and the main channel of Oruarangi Creek will become a second temporary lake.

SOOTY SHEARWATER __ 1 dead on 15/11/57; 1 juv. dead on 8/5/58 with wing (272 m.m.) not fully grown.

GANNET __ 4 on 2/6/58 riding out a gale in the middle of the new lake under the lee of Puketutu I.

BLACK SHAG \perp c. 70 on the new lake on 2/6/58 and c. 80 on 8/7/58.

PIED SHAG __ c. 30 on 2/6/58 and 20+ on 8/7/58, many being juv. Flight-lines point to frequent traffic between the new lake and the breeding colony at L. Pupuke, 12 miles away.

LITTLE SHAG _ The new lake attracted many.

BLUE HERON \perp 1 on 15/11/57; 2 on 2/6/58 on the lake; 1 on 5/7/58 at Ihumatao Pt.

WHITE-FACED HERON = 12+ at Ihumatao Pt. on 8/5/58 and 22 on 21/6/58. 1 on the new lake on 2/6/58.

BLACK SWAN _ 3000+ in mid-May off Ihumatao Pt. On 27/3/58, 2 had come on to the new lake, where numbers increased to c. 50 during August.

- S.I. PIED OYSTERCATCHER The number wintering far exceeded anything recorded before. c. 260 on 12/2/58; c. 500 on 4/5/58; 600+ on 2/6/58; c. 800 on 5/7/58; all beside the new lake. c. 300 off Ihumatao Pt. on 22/8/58.
- BANDED DOTTERELL ' c. 200 on 20/2/58; c. 12 on 9/4/58; 11 on 31/5/58.
- WRYBILL __ 107 on 4/1/58; c. 520 on 22/1/58; 580+ on 27/2/58; c. 650 on 27/3/58; c. 530 on 9/4/58; 520+ on 2/6/58; winter counts were difficult because 'Chinky Spit' is now high and dry and no tides cover it to drive the Wrybills off.
- BAR-TAILED GODWIT ___ Some hundreds throughout the summer with 3000+ in February and early March, 1000+ on 27/3/58. Some hundreds wintered, viz., 700+ on 2/6/58; c. 900 on 5/7/58.
- TURNSTONE = 30 on 12/3/58 and 32 on 9/4/58.
- KNOT _ c. 2000 on 5/2/58; 3000+ on 12/2/58 and 12/3/58; 3000-4000 on 27/3/58; Hundreds wintered, viz., 700+ on 4/5/58; 8/5/58; 5/7/58 and 8/7/58.
- SHARP-TAILED SANDPIPER __ 1 on 22/1/58 and 9/4/58, when it was well streaked on the flanks.
- CURLEW SANDPIPER __ 1 on 22/1/58 and 27/2/58, a grey bird with Wrybills.
- PIED STILT The dammed explosion crater and new lake are proving an irresistible all-year-round attraction for Stilts. c. 50 on 15/11/57 in the explosion crater. 100+ on the lake on 5/2/58; 500+ on 27/3/58; 800+ on 4/5/58. During winter many gather at full tide at Ihumatao Pt., e.g. c.150 on 8/5/58. 200+ on 21/6/58; c. 500 on 5/7/58. On 13/8/58, c. 200 had returned to the explosion crater, where the shallow water was green with a lush growth of alga.
- CASPIAN TERN __ c. 40 non-breeders on 15/11/58 was a big flock for the time of the year in this area. c. 80 on 4/1/58; c. 200 on 5/2/58; 180+ on 4/5/58. They gather beside the new lake and usually many are fishing over it. Another regular roost is at Ihumatao Pt., viz., c. 40 on 8/5/58 and 21/6/58.
- WHITE-FRONTED TERN __ A rare visitor to this part of Manukau. 2 over the new lake on 4/1/58.
- WHITE-WINGED BLACK TERN _ 1 feeding over the teeming ooze of the explosion crater on 8 and 11/10/58, an adult in worn breeding dress still black on the belly, probably the bird from Harania Ck.
- PIPIT ___ The Pipit is such a rare bird in this district that the arrival of a pair is worth recording. They were first noted on 4/5/58 on the earthworks at the end of the old causeway and were still there on 24/7/58.

___ R.B.S.

MANUKAU _ (c) KARAKA - PUHINUI

GANNET __ 12 off Seagrove on 17/8/58.

- LITTLE BLACK SHAG __ Numerous in winter between Weymouth and Hingaia; biggest count 74.
- BLUE HERON \perp 1 on the old jetty at Kidd's on 22/6/58.

- LITTLE EGRET __ 27/8/58, Mr. G. H. Smith evidently saw one at Karaka.
- WHITE HERON _ 2 on Karaka shellbank on 29/10/57, transients.
- WHITE-FACED HERON 6 on 12/4/58; odd birds may be found now at any time along the shore; one flying inland on 11/10/58 at Puhinui evidently to a nest in one of the many groups of pines or gums in this locality.
- ROYAL SPOONBILL __ 3 which had wintered (1957) in Pahurehure inlet, with its many long winding arms, evidently summered also. They were seen frequently between Weymouth and Tironui during November and December; after which they appear to have moved up the secluded Hingaia River towards Drury, where Ruth and David Trower found them on 19/4/58. On 13/5/58, Mrs. C. R. Moffat reported 6 at Weymouth. These were frequently seen during the winter of 1958 and were still present in mid-October. It is possible that a seventh bird was present for a short while.
- S.I. PIED OYSTERCATCHER __ 400+ on 24/11/57 were evidently immature non-breeders; 600+ on 3/2/58; c. 1000 on 23/3/58 and 5/4/58. Many hundreds throughout winter.
- ASIATIC GOLDEN PLOVER __ 2 on 28/9/57; 18 on 3/2/58, the only waders in Higham's marsh to-day; 26 on 23/2/58, only the odd one not showing some black and more than half in well-developed nuptial dress.
- BANDED DOTTEREL $_$ 3 on 28/9/57; 49 on 27/1/58; c. 70 on 22/2/58; 116 on 11/3/58; c. 200 on 23/3/58; 50-60 on 5 & 6/4/58; c. 170 on 22/6/58, the majority being in breeding dress; 220+ at Seagrove on 6/7/58; c. 70 on 17/8/58; 2 on Karaka shellbank on 28/9/58.
- RED-BREASTED DOTTEREL __ 2 on 23/3/58; 4 on 5/4/58 in Kidd's marsh; 8, in a sodden paddock of short lush grass, well back from the beach at Seagrove on 6/7/58, an unusual place to find this species. Three were reddening.
- WRYBILL $_$ c. 350 on 28/9/57; 20 on 29/10/57; 8 on 24/11/57 and 8/12/57; c. 1100 on 27/1/58; c. 900 on 22/3/58; 600+ throughout winter; c. 400 on 17/8/58; c. 105 on 28/9/58.
- LONG-BILLED CURLEW __ 1 at Karaka during March; 4 at Seagrove on 1/6/58, 22/6/58 and 6/7/58; 2 on Karaka shellbank on 28/9/58.
- BAR-TAILED GODWIT __ 6000+ on 28/9/57; 6000+ on 22/2/58; c. 5000 on 11/3/58; c. 1000 on 23/3/58, of which few were red; some hundreds on 6/4/58, red birds being scarcely 1%. c. 190 on 6/7/58; 500+ on 17/8/58; c. 3000 on 28/9/58.
- HUDSONIAN GODWIT ___ 1 on 5/4/58. With its conspicuously dark axillaries and sooty underwing, it was quite distinct from Asiatic Blacktailed Godwits recently seen in the Firth of Thames (J.C.D., R.B.S.).
- TEREK SANDPIPER __ The single bird which wintered in Manukau in 1957 was present in the Karaka coast till March 1958, when it was joined by a second bird. The two, one distinctly larger than the other, were seen on a number of occasions between 11/3/58 and 20/4/58. The 'shoulder tabs' of the larger bird were more strongly marked. The two often came into Kidd's marsh with Wrybills.

- GREY-TAILED TATTLER _ A single bird was recorded on numerous occasions between 29/10/57 and 20/4/58. At full tide, if it was not on a fence post, it often resorted to a piece of driftwood which formed an arch, on which it would run up and down.
- TURNSTONE ___ 196+ on 3/2/58; c. 300 on 11/3/58; 200+ on 23/3/58; c. 300 on 6/4/58; 40 on 6/7/58, 7 of which were away from the shore in a waterlogged paddock at Seagrove with Banded and Red-breasted Dotterels; c. 60 on 17/8/58; c. 100 on 28/9/58.
- KNOT __ Scarce at Karaka in the spring, viz., 2 on 28/9/57, none on 24/11/57 or 8/12/57; c. 6500 on 22/2/58; c. 6000 on 11/3/58; 500+ on 6/4/58. Many wintered, viz., 1000+ at Karaka on 22/6/58, many being fully red and most showing some red; and at Seagrove on 6/7/58, 1200+. 500+ on 17/8/58.
- SHARP-TAILED SANDPIPER _ One on 29/10/57, and 3/2/58.
- RED-NECKED STINT $_$ 5 on 29/10/57; 8 on 8/12/57; 9 on 27/1/58; 10 on 22/3/58; 11 on 5 & 6/4/58; the largest flock so far recorded in Manukau, one very red on head and neck, another showing some colour, but nine looking like gray yearlings. 9 on 20/4/58; 4 on 6/7/58 and 17/8/58; 10 on 28/9/58.
- PIED STILT Oaklands Rd., 2 nests with eggs 28/10/57 and 7/11/57. Usually some non-breeders linger up the creeks, e.g., c. 50 at Whanga maire on 14/9/57; but the open Karaka coast is virtually deserted in spring and early summer, viz., 2 on 28/9/57, none on 24/11/57; but 200+ on 6/4/58; 800+ on 1/6/58 between Seagrove and Papakura; hundreds on 17/8/58; 4 on 28/9/58.
- CASPIAN TERN _ Very few on 24/11/57; plentiful from January to August, e.g., 150 on 3/2/58.
- WHITEFRONTED TERN $_$ c. 40 on the old jetty on 5/4/58; c. 80 on 10/4/58.
- TERN (Sp.?) __ 2 small terns (albifrons/nereis) were present from February to April, sometimes resting on the old jetty, sometimes among waders, especially Wrybills.
- HARRIER _ Nest with 4 eggs at Puhinui on 11/10/58.

__ R.B.S., H.R.McK.

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SHORT NOTES

NESTING OF NEW ZEALAND PIGEON

"On 10/1/58 I was able to find a nest of the N.Z. Pigeon. This nest was roughly 9 feet from the ground in a well shaded position, in low bush and about 300 yards from the caretaker's house on Kapiti Island. It was approximately 100 yards from the edge of the bush.

I observed the nest every day from 9 a.m. to 1 p.m. until the 16th January and during these periods a pigeon was continually on the nest. I could not tell whether it was always the same pigeon. The bird or birds were very tame and I had to approach within touching distance on the 10th before the sitting bird raised itself sufficiently for me to see the egg.