BIRDS OF WHANGAREI HARBOUR

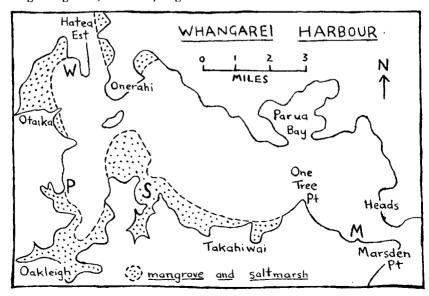
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This paper summarises the results of regular observation of the bird population of Whangarei Harbour over the period January 1970 to April 1971 and includes a selection of past records, published and unpublished, which provide evidence of increase or decrease of individual species during the period 1939-1970. Published records are mainly from Classified Summarised Notes (Notornis); previously unpublished records are from local observers, notably Mr. H. C. Hewlett, whose experience of Skull Creek wader roost, overlooked by his farm, goes back over a period of 50 years.

Bird counts were carried out by Whangarei Forest and Bird Society in 1962 and by a team led by G. P. Adams, Wildlife, in 1970, but no general account of the area has been published. Modifications of environment in the upper harbour by dredging and reclamation at Port Whangarei and by discharge from Portland Cement Works so far appear to have helped rather than hindered the bird population of the harbour; establishment of Marsden Point Oil Refinery and expanding industry at Port Whangarei may in time have an opposite effect. This paper attempts to provide a set of data by which future changes may be assessed.

WHANGAREI HARBOUR

Total area about 40 square miles, of which about 25% is mangroves and saltmarsh and perhaps 50% is exposed mudflats, excluding mangroves, at low spring tides. The northern shore from Onerahi



to Whangarei Heads is rocky, with very little mudflat and no mangroves. The southern shore is sandy from Marsden Point to One Tree Point; from Skull Creek to Takahiwai extensive areas of mangrove and saltmarsh with a few shellbanks lie behind a vast area of mudflats which at low tide support the bulk of the wader population. The upper harbour, an estuarine area west of a line drawn from Onerahi to Skull Creek, is mainly mangroves and mudflat, modified as stated by dredgings and effluent. A major wader roost at Skull Creek and a smaller roost at Marsden Bay sandspit are submerged at spring tides: there are spring tide roosts at Portland and at Whangarei Port where, within a few hundred yards of a busy shipping terminal, thousands of waders congregate and dotterels, terns and gulls breed in season on the man-made habitat. Ruakaka is also used as a roost at spring tides.

SPECIES LIST

Selected previous records are included, followed by my own 1970/71 record summary. Where no previous record is given the species was not recorded until the 1970/71 survey. Observers are identified by name or by initials, as follows:—

G.P.A. (G. P. Adams); L.W.D. (L. W. Delph); C.W.D. (C. W. Devonshire); A.T.E. (A. T. Edgar); C.A.F. (C. A. Fleming); H.R.McK. (H. R. McKenzie); K.R.R. (Mrs. K. R. Reynolds); W.S. (Wesley Sanderson); E.K.S. (E. K. Saul); P.D.G.S. (P. D. G. Skegg). Where no reference is given the observation is from my own note books.

The main wader roosts are identified by letters:—

M = Marsden Bay; P = Portland; S = Skull Creek;

W = Whangarei Port.

The list of species follows 1970 Annotated Checklist.

Blue Penguins breed around the northern shoreline. Petrels and Shearwaters of various species occur at times within harbour limits, but are not discussed here, as pelagic birds are outside the scope of this paper.

Gannet Sula serrator. Occasional large flocks in winter, e.g., Portland Channel (H.C.H.); Parua Bay, 100, July 1942 (W.S.); 50 on 18/7/70. 29/10/55, Taurikura, 150 (H.R.McK.).

Black Shag *Phalacrocorax carbo*. 1941, 40-60 on the western side of the harbour (W.S.); 1970-71, present in small numbers, usually ones and twos, no flocks seen.

Pied Shag *P. varius*. A long-established colony in dense mangroves at Skull Creek; 1940, c10 nests (W.S.); August 1970, 60 nests, eggs and young. Breeds elsewhere around the harbour in small numbers. Population has increased. 1940, small numbers, less numerous than *melanoleucos* (W.S.). 1970, the commonest species, more numerous than *melanoleucos*; roosting flocks, upper harbour, up to 50; Parua Bay, 18/7/70, 80.

Little Black Shag *P. sulcirostris*. Apparently an autumn and winter visitor. 15/6/42, 26 (W.S.). Taurikura, flock of up to 25 in season (L.W.D.). Hatea Estuary, 1970/71, February to July, flocks of 20-30. Harbour population c50,

Little Shag *P. melanoleucos*. Population has declined. 1942, the commonest species, up to 100 roosting at Skull Creek (W.S.). 1970, largest count 25. 1965, both phases reported breeding in Oakleigh colony.

Spotted Shag Stictocarbo punctatus. November 1940, one seen (W.S.). December 1970, one dead, Skull Creek (H.C.H.).

White-faced Heron Ardea novaehollandiae. Earliest harbour record 1949 (Notornis 17: 12). Skull Creek, 1950, two; by 1960, 60 (H.C.H.). 1970/71, flocks of up to 80 roosting in mangroves and on paddocks inland at high tide. Estimated harbour population 200+.

White Heron Egretta alba. Occasional in winter at Oakleigh, Skull Creek, Hatea Estuary, Parua Bay (H.C.H., W.S.). Not recorded since 1960.

Reef Heron E. sacra. Breeds at Aubrey's Island, off Whangarei Heads. Local residents consider that numbers have declined over the last 20 years. Still present along northern shore, at Marsden Bay and in the Hatea Estuary; none seen recently at Skull Creek. Decline in total numbers may be real, or apparent because of withdrawal of sacra from estuarine areas now occupied by increasing numbers of White-faced Herons.

Bittern Botaurus stellaris. Port, observed around a pool on reclaimed land.

Royal Spoonbill *Platalea leucorodia*. 1968, two reported in Otaika Estuary.

Black Swan Cygnus atratus. Winter flocks formerly up to 130, now only occasional parties of 8-16 (H.C.H.). Used to feed on sea grass; reduction in numbers as this food supply disappeared (W.S.).

Mallard Anas platyrhynchos

Grey Duck A. superciliosa. Both species present in large numbers, including many hybrids.

Brown Teal A. aucklandica chlorotis. Formerly numerous at Otaika, disappeared around 1940 (H.C.H.). 1940, bred around Skull Creek, none seen since 1943 (W.S.). Small numbers present in Parua Bay near Onerahi until 1960 when disappeared. 20/3/71, Parua Bay, one, with grey duck (C.W.D.).

Banded Rail Rallus philippensis. Skull Creek, 1940, common and breeding (W.S.); none in recent years (H.C.H.). Still present in various localities around the mangrove fringe (C.W.D. et al).

South Island Pied Oystercatcher *Haematopus finschi*. Autumn and winter visitor, numbers increasing. M, 1956, 22 (H.R.McK.); 1958, 50 (J. & A. Prickett); 1961, 70 (O. Cullen); 25/7/70, 350; 115 still present on 21/11/70. Harbour counts, July 1970, 540; 20/3/71 450.

Variable Oystercatcher *H. reischeki*. Outer harbour, up to 20 recorded in area Whangarei Heads-Marsden Bay.

Pacific Golden Plover *Pluvialis dominica*. S, 21/2/70, 9; 14/3/70, 14; 24/10/70, 18; 5/12/70, 14; 30/1/71, 8. Oakleigh, one, 20/3/71.

New Zealand Dotterel Charadrius obscurus. M, 24/11/59, 20 (Notornis 9: 75). 1970, bred at S (up to 3 pairs); M, one pair; W, 10 pairs, on reclaimed land. Not less than 14 pairs therefore bred within harbour limits. It may be assumed that at least a proportion of the 20 birds seen at M in 1959 were breeding. The reclaimed area on which birds now breed at W was created in 1968, and has been quickly utilised by dotterel as a main breeding ground. 1970/71, pre-breeding flock, W, August, 42. Autumn flocks, M, March, 37; S, April, 50; W, May, 38. The 10 resident pairs may be seen at W in any month of the year. Autumn flocks appear to move between the three roosts.

Banded Dotterel *C. bicinctus*. S, between 1930 and 1950 about six pairs nested on pasture and ploughed land (H.C.H.); May 1942, flock of 200 (W.S.) W, a pair may have nested in 1970. Flocks, autumn and winter, Onerahi Airport, fairly regular, up to 240; S, mainly in autumn, up to 250; W, late summer, up to 200. Harbour count, 20/3/71, 415.

Wrybill Anarhynchus frontalis. 1957, M, up to 12 reported (H.R.McK.). 1970, W, January-August up to 100; P, up to 50; overall counts, May 120, August 115. 1971, March, P, 70; W, 44; total 114. S, occasional, once 32.

Long-billed Curlew Numenius madagascariensis. S, 1939-41, two on occasions (W.S.); P, 14/3/70, one (A.T.E.).

Asiatic Whimbrel N. phaeopus variegatus. 1970, sightings of a single bird, ssp. unid., W, May; S, July. S, September, two, identified as variegatus.

Bar-tailed Godwit Limosa lapponica. 1951, harbour population estimated at 3500 (H.R.McK.). 14/3/70, harbour count, 3000 (G.P.A.). Biggest flocks (up to 2400) at S; smaller flocks at P and W, except at spring tides when additional birds congregate especially at W, from other parts of the harbour. Winter flocks, previous records 300-350 (various observers); 1970, July, S, 500; W, 85; total 585.

Terek Sandpiper *Xenus cinereus*. W, 10/1/70, one; S, 11/4/70, two; 11/7/70 and 5/9/70, one. P, 27/2/71, two; 27/3/71, three; 12/5/71, one.

Turnstone Arenaria interpres. 15/12/60, P, 6 (P.D.G.S.). 1970, S. single birds in February and April; W. January, 7; February, 6; March, 3; April to July, one. 1970/71, W. 2 in September, 6 in October-November, 10 in December-January, 5 in February.

Knot Calidris canutus. Present in season for the last 50 years (H.C.H.). 14/3/70, harbour count, 2900 (G.P.A.). S is the usual roost, but 2500 at W on a February 1971 spring tide. Counts of over 2000 have been recorded only in February and March: October-January population seems to be nearer 1000. S, 12 on 11/7/70.

Red-necked Stint C. ruficollis. W, one on 28/9/69 and in January - March 1970.

Pied Stilt *Himantopus himantopus*. A few pairs have nested around the harbour for many years; autumn population probably 7-800, 75% in the upper harbour.

Black Stilt H. novaezealandiae. Occasional black or near-black stilts recorded at S in past years (H.C.H., W.S.).

Southern Skua Stercorarius skua lonnbergi. 31/5/42, one seen at S during a south-easterly storm (W.S.).

Arctic Skua S. parasiticus. Occasional in season, with White-fronted Terns.

Black-backed Gull Larus dominicanus. Single pairs nest around the harbour. 12 pairs nested on W dredging islands in 1970. Large congregations at Hatea Estuary and city dumps in autumn and winter.

Red-billed Gull *L. novaehollandiae*. Nesting colonies of up to 200 pairs on various rocky islets at Whangarei Heads (K.R.R., L.W.D.); island in Parua Bay, 155 pairs, 1955 (H.R.McK.); W. dredging islands, 200 pairs in 1968, only 20 pairs in 1970. Large winter flocks, c. 8000 roosting on W wharf in April 1970.

Caspian Tern Hydroprogne caspia. S, 1940, 180 pairs (W.S.). Population has declined. S, August 1970, 30 pairs. W, dredging islands, 1968, 12 pairs; 1969, 30 pairs; 1970, at least 15 pairs. Scattered pairs nest around the harbour.

Fairy Tern Sterna nereis. S, up to 5 recorded 1939-43 (W.S.); pair with nest scrape 1951 (E.K.S.). P, 14/12/60, one (P.D.G.S.); 30/1/71, 8 birds, including one juvenile.

Eastern Little Tern S. albifrons. P, 14/12/60, 3; 29/1/62, 7 (P.D.G.S.). Sighted in 1970. 1971, January, one off Parua Bay (H.C.H.); W, 27/2/71, 3; P, January-February, certainly 6, probably 12 birds.

White-fronted Tern S. striata. 1940, 100 pairs nested on shell-bank at Onerahi west; 1941, S, 24 pairs nested at the Caspian Tern colony (W.S.). Frenchmen stack, Whangarei Heads, c. 150 pairs nest annually (K.R.R.). W, dredging islands, 100 pairs nested 1968 and 1970. A report of 50 pairs nesting on Snake Bank (Whangarei Heads) 1/1/71.

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Full details of all counts will be deposited with O.S.N.Z. Recording Scheme.