

## INQUIRY INTO THE STATUS AND DISTRIBUTION OF THE DABCHICK (*Podiceps rufopectus*).

Members of the Society are asked, as far as lies in their power, to examine likely waters in their districts.

The following questionnaire will serve as a guide to the kind of information required:—

Name of water.

Area.

Height above sea-level.

Type of water (e.g., bush surrounded; swamp surrounded; clear: peaty; muddy; shallow or deep, etc.).

Number of birds.—Breeder or visitors.

Any evidence of migration?

Any evidence of flocking out of the breeding season?

Have human operations, e.g., bush-felling or settlement, altered the character of the water?

Is the water liable to change its level from flooding, more than previously?

Are Great Crested Grebes also present? (Relevant to S.I. only.)

Size of broods.

Enemies.

Do you know of any areas where the dabchick has occurred only rarely and is not a resident?

In areas where dabchicks are absent, have you any evidence as to their former presence, and date of disappearance?

What waters do you know where the dabchick is certainly not resident?

In all matters concerning this inquiry communicate direct with R. B. Sibson, King's College, Otahuhu, Auckland.

If dabchicks are not present in your district do not fail to send in information to that effect.

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#### NOTE CONCERNING THE BANDED DOTTEREL INVESTIGATION.

Coloured celluloid bands (budgerigar size) suitable for marking young dotterel, can be obtained from local aviculturalists or from Hutchison Bros., Auckland, (at 1/3 per dozen). A limited number are available without charge to members who are at all likely to be able to catch dotterel chicks during future nesting seasons. Apply to R. H. D. Stidolph, Cole St., Masterton. It is hoped to restrict each colour to a definite breeding district. Do not put bands on any dotterel without communicating first with the organiser of this investigation, or confusion will result.

#### MOVEMENTS OF RED-BILLED GULLS IN THE AUCKLAND DISTRICT.

By P. C. BULL.

(Owing to Mr. Bull's absence overseas, this report has been condensed by the editors to enable publication.)

The following report is based on more or less regular "counts" of a common species throughout the year; similar regular counts by other members in the future may modify or confirm the conclusions reached. "Migrations" include both daily and seasonal movements, the latter connected with breeding, the former chiefly connected with obtaining food. Four general classes of movement may be recognised.

##### I. The Spring Movement.

All breeding adults migrate in spring from the wintering to the nesting region. The chief breeding place of Auckland Red-billed Gulls is at Moko-hinau Island, some 50 miles to the north, though birds from the Three Kings, Bay of Plenty and other colonies (including unrecorded ones) may enter the region. At Mangere, in Manukau Harbour, daily visits to paddocks are made by decreasing numbers of birds in June and July, except when unusual conditions (of weather, or owing to ploughing) bring them in irregularly. This cessation of regular winter visits is shown in Graph III. That a passage movement begins after midwinter is also suggested by

the somewhat insufficient counts from Muriwai Beach at this period where there are for a time increased numbers of gulls between the periods of winter and summer scarcity (Graph I.). The spring movement to the breeding ground is apparently a slow drift over a long period. There are few left in the Manukau by August and September and thereafter, though even during the breeding season small numbers of gulls are present, particularly at wharves, sewers and abattoir outlets. Such birds may be chiefly in their first year.

## II. Movements at the Nesting Ground.

At a small colony at Tutukaka, movements of the adults were restricted and largely governed by the tides. Though the vast Mokohinau colony has not been visited, there is evidence that

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gulls from this concentration move well away from the islands to forage. At the Poor Knights in November, irregular but considerable numbers appeared daily, probably foraging parties from Mokohinau.

## III. The Autumn Movement.

After the breeding season migration occurs from nesting places to the wintering regions—chiefly Manukau Harbour and Thames estuary. In the Manukau Harbour, Red-billed Gulls are once more in numbers after the first week in February, but the counts from Muriwai and Motuihi Island suggest that passage movements are still going on in April. Continuous observations at Motuihi Island (in the Hauraki Gulf somewhat east of the direct line from Mokohinau to the Manukau) were made in the autumn of 1941, and show an obvious through-migration which has not been seriously affected by the new food supply provided by waste disposal at the island. The following notes on the daily observations supplement Graph II.:—

January 26	cries of gulls heard
„ 28	several groups of 15-20 gulls drifted over the island.
„ 29	12 on beach; apparently all adult.
February 1	8 on beach.
„ 3	15-20, feeding on scraps; all adult.
„ 7	50 on beach.
„ 12	60. First immature bird seen.
„ 13	100. Several immature.
„ 17	120.
February 20—March 15.	Many apparently left the island; 70 left.
March 31	Over 200
April 6	150
„ 8	100. Many young.
„ 10	60. Probably normal winter population.

Graph II. bears a striking resemblance to that of the Muriwai numbers for the same period. (Graph I.) Muriwai is also to be regarded as an intermediate region, but it is not certain where the Muriwai birds breed. The autumn maximum occurs at the same time at both localities and it is clear that both places lie on the passage route of birds moving from breeding to wintering ground.

At Motuihi the relative numbers of immature and adults varied greatly. Apparently the young collect together with one or two adults and frequent artificial sources of food—parks, sewers or refuse dumps—showing little of the regular daily movements that characterise the large winter flocks of adults. The percentages of young in autumn flocks observed may be listed:—

	% Young	Locality.	Remarks	Total No. in flocks.
28/1/40	8%	Takapuna		130
16/2/41	0%	Oneroa, Waiheke	Two different flocks	15
	10%		"	50
18/2/41	95% (approx)	Motuihi Id.		50
19/2/41	10-90%	Young increased in wake of boat from Central Wharf to North Head		35
22/2/41	50% (approx)	Motuihi Id.		50
9/3/41	30%	Muriwai		53
8/4/41	100%	Motuihi	On lawn after rain	18
10/4/41	12%	Motuihi	On rocks at low tide	30
28/4/41	72%	Albert Park	Feeding on scraps	26
29/4/41	58%	Auckland Dmn.	3 groups with individual %s of 71, 28, 68%	54
1/5/41	1% (approx)	Mangere	True winter flocks	500
1/5/41	5%	Mangere	in Manukau Harbour	100

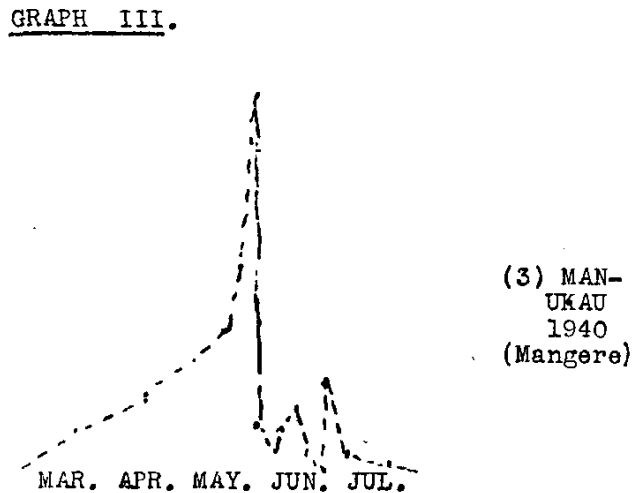
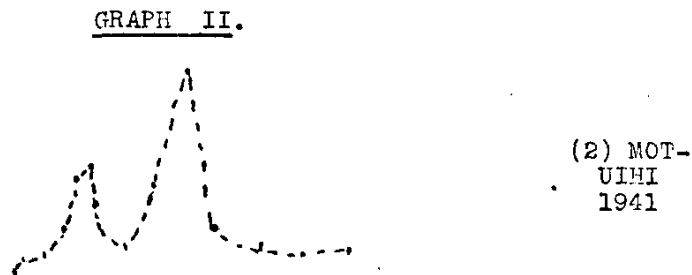
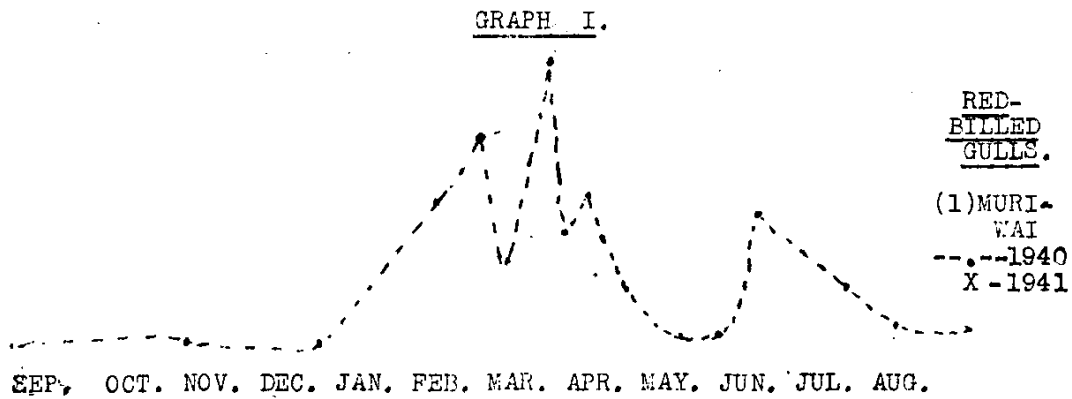
By April the Motuihi population was fairly constant—probably winter residents. Of them some 20 immature birds became very tame, feeding on lawns. Of these 4 were found dead and 2 believed to have died, within 10 days of cold windy weather—a 20% mortality in 10 days.

The first arrivals at both Mangere and Motuihi are adults, immature birds not appearing till later. The large Manukau flocks never contain more than 5% of immature (except possibly near the freezing works).

#### IV. Movements at the Wintering Ground.

Such movements are daily and governed by feeding requirements. Tide conditions also influence the number partaking in and the duration of the regular visits made in the early morning to paddocks. During such visits the gulls work methodically across the paddocks as if feeding. The visits begin when autumn rains soften the ground, and end with late winter hard frosts; they occur from daylight till about 7.30 a.m. though the birds leave earlier when the tidal flats are uncovered. In addition, there are regular movements of 10 miles extent from Onehunga (at high tide) to Ihumatao when the tide uncovers the mud banks, and movements from Manukau to the East Coast estuaries take advantage of the differences of tide on the two coasts. Rough weather or rain causes an inland movement irrespective of tide or time of day, as does the attraction of newly ploughed fields.

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# SEABIRD CENSUS ALONG THE THAMES COROMANDEL ROAD by P. C. Bull.

Frequent trips along this road during the last few years have offered opportunity to make the following censuses of seabirds. Successive counts in a short period vary greatly, owing to differences in tide and weather. Migration is, however, revealed by the figures for stilts and gulls. The movements of White-fronted terns are obscure and seem particularly susceptible to weather and tidal conditions. If nearby colonies were known their presence along the coast in the breeding season and well up the river estuary soon after the new year might be explained.

Records of shags apply chiefly to the Thames beacons; of stilts to the mudflats at Thames and Manaia; of gannets to off-shore waters in which they were fishing, their numbers varying with visibility. As the road does not always follow the coast, the stretch is not the best possible for such counts.