Twice we saw huge aggregations of these birds in the late afternoon. On calm evening just before sunset they came from the open sea into the channel between Green Island and Ruapuke. They swept past the point below our hut in a stream a quarter of a mile wide and so dense that we estimated that from fifty to one hundred birds were passing per second. This flight lasted for half an hour, by which time there were great rafts of birds scattered over the channel. Later, in the dusk when these flocks took flight it was like huge clouds of smoke drifting over the sea. Through field glasses each flight was an indescribable jumble of flashing white underparts and darker backs.

On another afternoon when a heavy wind got up suddenly, the birds again traded round this point, the nearest of them not twenty yards from the shore. Here we could separate the two species, and we arrived at the conclusion that there were about twenty-five dove petrels for every whale-bird. But there is no certainty that this is the proportion in which the two species nest on the island. Actually I came away with the idea that there were probably about twelve dove petrels' nests for every whalebird's.

(I have used throughout the name "Whale bird" for P. vittatus as I have no doubt that it was the profile view of its head that gave this bird its very appropriate trivial name, and not its association with whales. The Dove Petrel (P. turtur) too, received its trivial name from its appearance and not from any association with doves.)

RARE WADERS IN THE FIRTH OF THAMES. By R. B. SIBSON.

On October 27, 1941, on the west side of the Firth of Thames, I was able to visit at full tide, a shingle bank where waders were known to assemble. To my surprise, since it was the middle of their breeding season in Canterbury, a party of Wrybills (Anarhynchus frontalis) (22) was still present. They behaved with the tameness which they customarily show at their high tide roosts and so I was enabled to view at a distance of a few yards a Curlew Sandpiper (Calidris testacea) and four Red-necked Stints (Calidris ruficollis) which were associating with them.

Although of much the same size as the Wrybills, the Curlew Sandpiper stood out at once by reason of its decurved beak, longer legs and browner grey. It was a pale bird, almost white underneath and brownish grey above, with no outstanding plumage features except a white eye stripe. When it flew among the Wrybills it was not easily picked out, and I found it difficult to see the diagnostic white rump. Judging from its colourless plumage I should say it was a bird of the year. This would seem to be the first record of Curlew Sandpiper for the North Island.

Of the Stints, two showed distinct traces of red about the neck, and were, I imagine, adults not completely moulted out of breeding plumage. The other two were much paler and were probably birds of the year. In size they were midgets, even beside wrybills.

On November 9, Messrs. H. R. McKenzie, J. St. Paul and I visited the same shingle bank again at full tide and found eighteen Wrybills and presumably the same four Red-necked Stints present. The Curlew Sandpiper had gone.

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At Easter, 1942, Messrs. H. R. McKenzie, P. H. Wood and I camped at Miranda for the purpose of observing waders. On April 6 full tide found us strategically placed on the shingle bank mentioned above. At one end were about 130 South Island Pied Oystercatchers (Haematopus ostralegus Finschi)—among which was an albino—at the other a flock of Wrybills, estimated at 700 on the average of three independent counts, and with them two Red-necked Stints. Both of these were in almost full breeding plumage with richly mottled backs and wings and well developed red neck bands. Excellent views were obtained at less than ten yards, and a thin, weak note "chit-chit" was heard.

On April 5, a visit was made to the flats at the mouth of the Piako River. Stilts, Godwits, Knots and a few Wrybills were crowded together on the narrow strip of mud left between the tide line and the salicornia. The stilts and wrybills were very passive, but the restive Godwits and Knots quickly took wing and flew about. Clear above the chatter of the Godwits came the rippling call of a Whimbrel (Numenius phaeopus? varegatus). The call was repeated several times and it is possible that more than one bird was present. I had one good view of a Whimbrel in flight with some Godwits, and had the impression that it was a little larger in the body than they. The decurved beak, of about the size of the beak of a female Godwit, was very distinct. There are few, if any, records of Whimbrel for the mainland of the North Island.

A Curlew (Numenius cyanopus) was seen on three successive days—on April 4 and 6, just south of Miranda; on April 5, at the mouth of the Piako. There should be no mistaking this large curlew. We first heard its call, a slow, deliberate "ker-woik," and as it flew leisurely past us, its massive decurved beak, hardly less than 7in. in length, put identification beyond doubt. In flight with Godwits it appeared twice their size. It was a restless bird, flying up and down the shore when the tide was full, and sometimes disappearing out over the waters of the Firth, only to return again shortly. It would temporarily join any passing flock of waders, Godwits, Knots or Stilts, but would quickly leave them and go off alone, uttering its melancholy call.

SOME OBSERVATIONS ON BLACK-BILLED GULLS (Larus Bulleri) by R. B. Sibson.

The Rotorua lakes or some of them have long been known as the only breeding place of Larus Bulleri in the North Island. The following observations show that:

- (a) There may be an odd pair nesting away from the volcanic plateau;
- (b) There is a definite migration from some undetermined locality to the coast—certainly of the Firth of Thames and perhaps of the Bay of Plenty.

BAY OF PLENTY.—On September 8, 1940, W. Ridland and I saw a pair at the mouth of the Rangitaiki River. They showed territorial

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aggressiveness and tried to keep the sand spit which they were occupying, clear of Red Billed Gulls. Shortly afterwards another pair was seen at the mouth of the Tarawera River, and on the next day, a pair was noted at Matata Lagoon. These places are not far from the headquarters of Larus Bulleri on the volcanic plateau. It seems possible to explain the presence of these gulls in these places in one or two ways, either:—

- (a) They were outlying breeding pairs extending the range from the Rotorua colony, or
- (b) They were birds which had wintered on the coast and had not yet returned to their breeding grounds.

FIRTH OF THAMES.—Considerable numbers winter here. They were first noticed on August 3, 1941, when between 250 and 300 were present, the tide being full, at the mouth of the Miranda Creek. All observations since have been made at the mouth of this creek near full tide. When the tide is out it is difficult to see any at all, as they evidently feed out over the main waters of the firth. As spring advanced their numbers steadily declined. With the approach of winter, Black Billed Gulls have reappeared in the same place. The following counts have been made:—

1941: Aug. 3, 250-300; Oct. 12, 160; Oct. 27, c. 50; Nov. 9, 10 plus; Nov. 30, 15; Dec. 31, nil.

1942: Jan. 12, nil; Feb. 8, nil; March 8, nil; April 4, 14; April 6, c. 100.