## GIANT PETRELS AS MIGRANTS TO NORTHERN NEW ZEALAND

By R. B. SIBSON

Few winters now pass without reports of numbers of Giant Petrels (Nellies) Macronectes giganteus in the Waitemata and inner waters of the Hauraki Gulf. These waters offer comparative shelter during the season of south-westerly gales. Nellies are also attracted by shipping; and especially by the garbage-boat\*, also known as the gut-boat,' which formerly emptied the refuse of the Auckland markets somewhere out beyond Rangitoto Beacon. Consequently, now in the middle of the twentieth century, more Nellies are recorded in Auckland Harbour than ever were noted in earlier days. It may be significant that the earliest skin in the Museum locally obtained came from Karekare on the west coast in 1930. It is likely that there has been a similar increase elsewhere, e.g. Wellington Harbour and Cook Strait where the whaling station in Tory Channel was known to be a powerful decoy not only for Nellies, but also for Cape Pigeons Daption capensis, as long as it was operating. (Notornis 8, 78). It may also be true that as the Fulmar Fulmarus glacialis is now ranging further south in the North Atlantic, so the Nelly and Cape Pigeon are ranging further north in the South Pacific.

Dr. R. A. Falla has told me that during the 1920's he would sometimes see one or two Nellies from the Auckland Harbour ferries. In the 1930's C. A. Fleming might see as many as six. On 24/10/39 when I made my first acquaintance with Rangitoto Channel, four were hopefully criss-crossing the wake of M.V. Rangitiki. In the winter of 1942, W. Sanderson noted about ten following a steamer up the Whangarei Harbour. Six near Rangitoto on 6/12/46 and eight about the Auckland wharves on 11/11/47 were probably the remnants of considerably bigger winter concentrations.

Since 1952 several local observers have kept an eye open for Nellies entering the Auckland Harbour and I gratefully acknowledge their figures which supplement my own counts. Few Nellies reach the Waitemata before July. They are most plentiful between August and October. Some may still be present in December. The lean period is between January and May, when the first of the new season's casualties may come ashore on the west coast; but even during the hottest months a few are scattered over adjacent seas. Six off Kawau Island on 9/2/58 reported by Miss A. Goodwin, must have been attracted by exceptionally good scavenging.

<sup>\*</sup> Its memory is perpetuated in Gina Blanshard's vivid poem, "Auckland Harbour" —
Look out to Rangitoto and watch float,
The ramshackle flithy rubbish boat,
With seagulls crying in its wake
And feasting at its laden stern.

### Counts of Nellies in Auckland Harbour since 1952

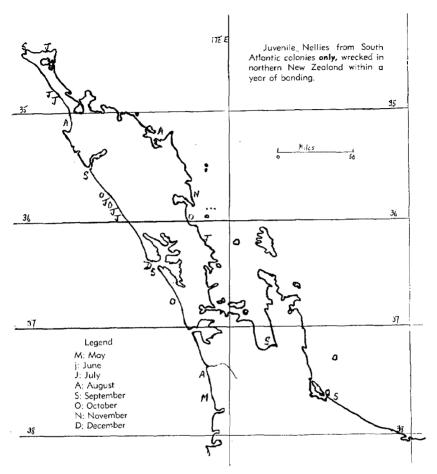
- 1952 6 on 27 Sept. (Miss N. Macdonald). 24+ on 26 Oct. (J. C. Davenport).
- 1953 c. 20 on 31 Aug.
- 1954 26+ on 22 Aug.
- 1955 16 on 22 Aug.
- 1956 10+ during August (Mr. and Mrs. J. Prickett).
- 1957 No observations.
- 1958 14 in early October off Moturoa feasting on a dead Blackfish (S. Chamberlin).
- 1959 8+ on 29 Aug.
- 1960 No observations.
- 1961 No observations.
- 1962 c. 30 on 18 Aug. 37 on 7 Sept.
- 1963 None on 3 July.
- 1964 No observations.
- 1965 12+ on 25 Sept.
- 1966 23 on 17 Sept.
- 1967 6 on 9 July (B. W. H. MacMillan), 15 on 12 Aug., 12 on 12 Sept., 8 on 7 Nov.
- 1968 12 on 22 July (J. A. F. Jenkins), c. 20 on 5 Aug. (Mr. and Mrs. Fooks), c. 30 on 6 Sept. (B. W. H. MacMillan).

The last stage of the long flight by which most Nellies reach the comparative shelter of the Hauraki Gulf must be up the Tasman Sea and round North Cape. In this respect Miss N. Macdonald's observation of seven outside Whangaroa Heads on 5/5/53 is significant. But while some continue northwards to reach Norfolk Island, Fiji and Tonga (Notornis 15, 158; 12, 158 and 14, 153), others succumb along the Auckland west coast, which in south-westerly weather becomes a lee-shore extending more than 250 miles. I can find no record of a Nelly's taking a short-cut from Tasman to Pacific across the Auckland Isthmus; nor have I ever seen a Nelly flying over the almost land-locked waters of Manukau Harbour; but E. K. Saul saw four off the end of Mangere Airport on 13/10/66.

Of fourteen deposited in the Auckland War Memorial Museum between 1930 and 1954, one was stranded in May, one in June, five in July, five in August, one in September and one in October. Nine of these came from Muriwai, where, for example, five were found ashore on 20/7/41, but not all were brought in.

Among the Muriwai Nellies are three of the four examples of the white phase which I can find recorded so far north in New Zealand. The first was found on 30/6/40 by C. A. Fleming and myself; the second on 25/7/54 by J. C. Davenport and H. G. Warburton. Further north A. T. Edgar on 24/9/66 found the old corpse of an almost completely white bird, at Taupiri Bay, south of Cape Brett. The fourth white specimen was salvaged from Muriwai by Lois Wagener on 17/8/68.

The winter of 1954 was very stormy and exceptional numbers of procellariformes from distant breeding grounds, such as Grey-headed Mollymawks (D. chrysostoma), Light-mantled Sooty Albatrosses (P. palpebrata), White-headed Petrels (P. lessoni), Blue Petrels (H. caerulea), Kerguelen Petrels (P. brevirostris) and Prions, especially salvini, desolata and belcheri, were driven ashore starving and



emaciated. (Notornis 6, 115-117). On the Awhitu peninsula and at Muriwai at least eight Nellies were found storm-wrecked. Meanwhile others were gathering in the Auckland Harbour, where the count of 26+ on August 22nd exceeded all previous counts. The peak period for casualties on the west coast is a week or two ahead of the biggest assemblages in the Waitemata.

Formerly the provenance of the Nellies which visit northern New Zealand was a matter of intelligent conjecture. But since the middle 1940's, thousands have been banded at their antarctic or subantarctic breeding grounds; and more than thirty have been recovered in New Zealand north of 38°S. The first relevant recovery appears to be of one banded in January 1952 at Heard Island and found the following winter near Raglan (Notornis 5, 184). However, if the ringing recoveries are a true guide, rather more of the Nellies which reach northern New Zealand come from the South Atlantic than from the South Indian Ocean. Some, too, come from rather

nearer home, especially Macquarie Island. The figures may be biased because by far the greatest numbers have been ringed in Falkland Islands Dependencies.

# TABLE 1 RECOVERIES IN NORTHERN NEW ZEALAND OF GIANT PETRELS

- (a) Banded in the Falkland Islands Dependencies
- (b) Banded on other Subantarctic islands

(a)	(5)	<u>!</u>	Place of	Banding	Date	Place of Recovery	<u>Date</u>
	Signey	Is.	South (	rkneys	22/3/56	Kamo	17/11/56
	н	**	Ħ	н	10/3/58	Waipu	9/10/58
	Ħ	n	tı	tr	Feb/Mar 59	Waiotemarama	5/7/59
	#1	**	ti.	Ħ	22/2/59.	Mayor Is.	25/6/61
	17	**	11	11	21/3/60	Dargaville	1/7/60
	11	11	n	N	18/3/60	North Kaipara Heads	9/1/61
	17	11	**	n	21/3/60	20m. S.of Dargaville	Oct. 60.
	Ħ	17	11	n	12/2/61	Te Arai	2/7/61
	10-	17	11	H	1 3/2/61	Tom Bowling Bay	25/7/61
	н	17	n	"	3/3/62	Port Waikato	5/8/62
	19	17	n	n	3/3/62	Bay of Islands	24/8/62
	11	11	ŧŧ	H	31/3/64	Omamari	12/10/64
	ŧi	Ħ	10	12	31/3/64	Tapu	3/9/64
	11	п	ti .	11	1 0/3/65	Hokianga	10/9/65
	n	n		11	10/3/65	Ninety Mile Beach	11/7/65
	*1	t1	"	**	13/3/66	Pakiri	6/11/67
	King George I South Shetla West Nelson I " " South Georgia				ls 31/3/59 29/1/67 Feb. 1959	Ninety Mile Beach Muriwai Maunganui Bluff	19/7/59 29/10/67 3 <b>0/</b> 7/59
	II	11			11	Te Akau	24/5/59
	Ħ	Ħ			11	<b>A</b> hipara	7/8/59
	Bird Is	. Sc	outh Geor	gia	1/2/61	Kaipara Heads	3/9/61
	H 11		n t	•	13/2/64	Te Puke	15/9/64
	ti 11		11 1	•	13/2/64	North Cape	28/9/64
	# #		H 1	1	15/2/64	Tauranga	12/10/64
(ъ)	Heard I	sland	i		14/1/52	Raglan	29/ 6/52
	11	11			14/2/64	Muriwai	25/ 7/54
	11	H			20/2/63	Ninety Mile Beach	30/ 8/64
	Macquar	ria To	al and		23/12/55	Ninety Mile Beach	1 956
	н		n .		2/3/59	Ninety Mile Beach	9/6/59
	11		e e		4/3/59	Maunganui Bluff	21/6/59
	#		n		3/3/59	Muriwai	16/5/59
			17		3/1/61	Ninety Mile Beach	6/7/61

A rather limited series of recovery dates suggests that Nellies from Macquarie Island pass up the west coast of the North Island ahead of those from the South Atlantic colonies. This is only to be expected. Nevertheless one youngster from South Georgia is known to have reached Te Akau scarcely three months from fledging; and one which succumbed at Suva, Fiji, in August had been banded as a nestling at Macquarie in the previous January. Many of the wrecked birds whose age is known from banding are about six months old; and most are well within their first year. But second-year birds have been found near Mayor Island and at Pakiri. However, mature birds with pale heads and necks are also winter visitors. One, unbanded, wrecked on Takatu Peninsula in August 1967, appeared to be a big old specimen of the Macquarie type (Wing 540, culmen 100, tarsus 98).

Nowadays Nellies that come ashore will very likely be found; and, if wearing a band, reported. Formerly in winter there were few human visitors to the exposed and rather inaccessible beaches of the west coast, except the occasional beach-combing naturalist and, in season, the ardent toheroa-digger. Muriwai, being handy to Auckland, became a rich source of skins for the Auckland War Memorial Museum. But now long stretches of coast west of Waiuku and Dargaville; and also the Ninety Mile Beach are easy of access. Surf-casting has become a popular sport and the weather has to be exceptionally bad to force anglers and others to stay away from the beaches. It seems something of an anomaly that so far so few banded Nellies have been recovered from Muriwai

Bourne and Warham in a stimulating and persuasive paper on geographical variation in Giant Petrels (Ardea 1966, 54, 45-67) have suggested that there are two 'sibling species,' distinguishable in appearance, proportions and behaviour. The southern form, which must be called *giganteus*, is polymorphic and includes the white birds; its young birds are highly migratory. The northern form *halli* breeds earlier — egg laying August-September as compared with November-December — on islands in the subantarctic zone of surface water. To this form belong the Nellies which breed on the subantarctic islands of New Zealand, and they appear to be comparatively sedentary. But at Macquarie Island the two 'sibling species' breed side by side, *giganteus* in open colonies, *halli* in isolated pairs under shelter; yet the two forms remain apart.

Using the morphological criteria which these authors enumerate, I have examined a series of Nellies locally obtained and now in the Auckland War Memorial Museum, and many others as cast ashore on northern beaches. All appear to be of the more southerly form, which in its migrations appears to leap-frog the more stay-at-home subantarctic breeders. It would be interesting to obtain a clear-cut specimen of halli from sub-tropical waters. And, finally, what about the many Nellies which frequent Cook Strait and Wellington in winter? Does halli occur among them; or are they also in the main migrants from the more distant antarctic colonies?

#### **ACKNOWLEDGEMENTS**

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## SEABIRDS FOUND DEAD IN NEW ZEALAND IN 1964

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#### ABSTRACT

During 1964, 45 members patrolled a total of 988 miles of coast and found 1,236 dead seabirds of 44 species. Mortality was highest in January and November, especially on some coasts exposed to westerly winds which were vigorous and prolonged in those months; on eastern coasts mortality was low throughout the year. There were no major wrecks. Fairy Prions (Pachyptila turtur) and Sooty Shearwaters (Puffinus griseus) were, typically, the most abundant species, especially on western beaches of the North Island in November. Unusual species included Silver-grey Fulmar (Fulmarus glacialoides), Black-winged Petrel (Pterodroma hypoleuca nigripennis), Sooty Tern (Sterna fuscata) and Little Whimbrei (Numenius minutus).

#### INTRODUCTION

This report differs from the earlier ones — listed by Boeson (1965) — in that records of gannets, shags, gulls and terns are tabulated in the same detail as for penguins and petrels; further, the records are grouped into 15 geographical zones instead of 18. The former zones of North Cape, Hawkes Bay and West Nelson have been deleted and their coastlines allocated among adjacent zones (Fig. 1).

#### RESULTS

During 1964, 45 people took part in the scheme. Their results are presented in Tables 1 to 5. Not included in these tables are 36 miscellaneous specimens among which the only one of particular interest was a Little Whimbrel (Numenius minutus) found in November on the Wellington West coast. The others were 6 Rock Pigeons, 6 Sparrows, 4 Magpies, 3 S.I. Pied Oystercatchers, 3 Greenfinches, 2 Black Swans, and 1 Bittern, Reef Heron, White-faced Heron, Northern Oystercatcher. Pukeko, Californian Quail, Shoveler, Paradise Duck, Starling, Blackbird and Goldfinch.

In Table 1 there are two measures of distance. 'Miles travelled' is the sum of the distances walked (or driven) by patrollers. 'Miles covered' is the length of coast actually inspected by patrollers. The

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