# SEABIRDS FOUND DEAD IN NEW ZEALAND IN 1976

## By C. R. VEITCH

## ABSTRACT

During 1976, 2 826 kilometres of coast were patrolled by 151 members of the Ornithological Society of New Zealand and their friends. 5 990 dead seabirds were found. There were no major wrecks. A number of minor wrecks involving Blue Penguins (*Eudyptula minor*), White-headed Petrels (*Pterodroma lessoni*), Sooty Shearwaters (*Puffinus griseus*) and Fairy Prions (*Pachyptila turtur*) are recorded. White-faced Storm Petrels (*Pelagodroma marina*) were found in higher numbers than ever before particularly on Canterbury South beaches. Patrols of Mason's Bay, Stewart Island, were the major factor contributing to the highest ever total of Mottled Petrels (*Pterodroma inexpectata*). The Grey Ternlet (*Procelsterna cerulea*) found is a second record and the Black-fronted Tern (*Chlidonias hybrida*) a new record for beach patrolling. The Christmas Island Shearwater (*Puffinus nativitatis*) found is a new record for the New Zealand region.

#### INTRODUCTION

This paper records the results of the Ornithological Society of New Zealand's Beach Patrol Scheme for 1976. The coastline of New Zealand is divided into 15 sections (Imber & Boeson 1969) with an additional grouping "OI" for Outlying Islands which this year includes patrols from the Chatham Islands. This year patrols were carried out on all sections of coast except Fiordland. 536 Beach Patrol Cards and 21 Specimen Record Cards were filed.

Nomenclature follows the Annotated Checklist (OSNZ 1970), except that, to save space in the tables, some tri-nomials have not been used.

### RESULTS AND DISCUSSION

The numbers of birds found and kilometres of beach travelled and covered per month and per coast are recorded in Table 1. The total distance travelled (3 284 kilometres) is close to average for the past 8 years (3 257 kilometres) and the total number of birds found (5 990) is normal for a year with no major wrecks. The average number of birds found per kilometre of coast covered monthly (2.12) is, therefore, also close to average. Kilometres travelled (Table 1) are the total lengths of coast patrolled; kilometres covered are the lengths of coast covered monthly. Hence, if a kilometre of beach is patrolled 3 times in one month, 3 kilometres have been travelled but only one kilometre covered per month.

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COAST	COD	E	JAN	FEB	MAR	APR	мат	JUN	NTHS JUL	AUG	SEP	OCT	NOV	DEC	кмто	TALS BIRDS	BIRDS/KM MONTH
AUCKLAND WEST	AW	Km Birds	133 535	93 197	53 11	107 77	98 180	195 259	72 71	124 148	161 1892	87 97	87 205	99 200	1309	3872	2.2 .
TARANAKI	т	Km Birds	17 36	12 7	7 3	13 4	15 4	14 0	8 1	40 17	<b>2</b> 6 5	2	-	5 2	157	79	0.5
WELLINGTON WEST	WW	Km Birds	13 106	13 99	10 11	Ξ	13 6	34 54	21 12	23 45	15 8	1 0	6 3	1 0	150	344	2.3
WESTLAND	WD	Km Birds	Ξ	-	Ξ	Ξ	-	-	-	Ξ	4	2	ել 1	1 1	ė	з	0.3
AUCKLAND EAST	AE	Km Birds	84 96	27 46	36 52	64 119	49 26	39 19	85 34	63 38	•33 15	44 13	40 33	46 78	610	569	0.9
BAY OF PLENTY	BP	Km Birds	6 26	10 3	2 1	2	3 1	4 4	11 5	14 2	. 3 3	8 0	1 4	Ξ	64	51	0.8
EAST COAST NORTH ISLAND	EC	Km Birds	Ξ	Ξ	-	2	Ξ	4 11	-	-	2 1	Ξ	Ξ	-	6	12	0.5
WAIRARAPA	ŴÅ	Km Birds	16 13	-	-	6 1		-	-	-	Ξ	-	5 1		27	15	0.6
CANTERBURY NORTH	CN	Km Birds	11 10	1 7	Ξ	5 5	1 1	4 2		4 3	5 7	1 2	Ξ	-	32	37	1.2
CANTERBURY SOUTH	cs	Km Birds	7 10	5 11	6 28	7 68	6 11	5	3 9	. 7	8 12	9 9	8 22	7 18	78	210	2.7
DTAGO	0	Kan Birds	13 13	7 11	1 3	Ξ	:	-	Ξ	Ξ	Ξ	-	-	-	21	27	1.3
SOUTHLAND	5	Km Birds	21 90	17 171	8 9.	6 5	12 34	6 4	6 2	6 1	-	-	Ξ	15 58	97	374	3.9
WELLINGTON SOUTH	VS	Km Birds	19 11	15 31	6 1	3 3	9 24	19 22	31 46	1 1	18 41	9 10	19 18	4 3	153	211	1.4
NORTH COAST SOUTH ISLAND	NS	Km Birds	<b>8</b> 91	2 10	2	4 8	:	4 10	2 10	3	4	2 0,	:	8 18	37	150	4.1
OUTLYING ISLANDS	01	Xm Birds	-		-	-	68 34	2	2	-	3	5 2	:	-	76	36	0.5
TOTAL KILOMETRES TRAVELLE TOTAL KILOMETRES COVERED TOTAL HIRDS RECORDED BIRDS/KILOMETRE COVERED/M			387 348 1037 3.0	234 202 593 2.9	162 129 119 0.9	272 217 292 1.3	310 274 321 1.2	385 328 390 1.2	277 239 190 0.8	352 285 264 0.9	329 282 1986 7.0	210 166 133 0.8	178 170 287 1.7	188 186 378 2.0	3284 2826	5990	2.12

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TABLE I Numbers of Dead Seabirds Recorded and Kilometres of Coast Patrolled in 1976\*

\*There were no patrols on the Fiordland Coast

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Although there were no major wrecks this year a number of minor wrecks have obscured any seasonal pattern of mortality. Monthly and coastal distribution of the more common birds is given in Tables 3 and 4 and of the less common birds in Table 2.

In January, following two periods of strong south-west winds, numbers of Blue Penguins (*Eudyptula minor*) and White-headed Petrels (*Pterodroma lessoni*) were higher than usual on Auckland West beaches. Sooty Shearwaters (*Puffinus griseus*) were more abundant on both Auckland West and Taranaki beaches. Fairy Prions (*Pachyptila turtur*) were found in higher numbers than usual on Wellington West beaches.

In February there was a continuation of the high numbers of White-headed Petrels and Sooty Shearwaters on Auckland West beaches. Additional numbers of Fairy Prions were recovered from both Auckland West and Wellington West beaches.

In April, for no apparent reason, there was an increase in numbers of Blue Penguins found on Auckland East beaches.

In September, following a deep depression west of Hokitika and a period of strong south-west winds, 1 530 Fairy Prions were found on Auckland West beaches north of the Kaipara Harbour. Patrols were carried out south of this point in both Auckland West and Wellington West areas but normal numbers of Fairy Prions were found there.

Gulls, both Black-backed (*Larus dominicanus*) and Red-billed (*L. novaehollandiae*) are a feature of North Coast S.I. results as many patrols there were along the Nelson Boulder Bank where many gulls are reported to be shot.

Canterbury South patrols recorded the usual high number of Spotted Shags (*Stictocarbo punctatus*) and this year there were also more White-faced Storm Petrels (*Pelagodroma marina*) than in past years. More east and south-east winds than usual in March and April increased the numbers of all species found on Canterbury South beaches during those months.

Southland totals were markedly affected by three patrols on Mason's Bay, Stewart Island, in January, February and December. These recorded high numbers of Sooty Shearwaters and were the major factor contributing to the highest ever total of Mottled Petrels (*Pterodroma inexpectata*) (48 birds; previous highest 29 birds in 1975).

More Grey-headed Mollymawks (*Diomedea chrysostoma*) were found this year (75 birds; being twice the previous average), particularly on Auckland West beaches in August and September.

The Grey Ternlet (*Procelsterna cerulea albivitta*) found in Auckland West in April is the second time this species has been recorded in the Beach Patrol Scheme (previous record: one bird in 1974).

SPECIES OR SUBSPECIES	NUMBER FOUND	COAST(S)	MONTH(S)
Megadyptes antipodes	4	cs(3), 0.	JAN, APR (3)
Eudyptes p. pachyrhynchus atratus sclateri	4 1 1	WD(2), S S CS	FEB(2), SEP, NOV FEB APR
Diomedea epomophora cauta salvini	14 14	WS(4) AW(2)	JAN, JUN, JUL, NOV FEB, SEP(3)
Pterodroma spy* h. nigripennis	3 2	AE(2), NS AE,OI	JAN(3) Mar, May
Procellaria cinerea aequinoctialis	<u>4</u>	AW(3), OI AW(4), S	MAY(3), DEC JAN, FEB, MAY, DEC(2)
Garrodia nereis	1	WS	JUL
Phalacrocorax carbo melanoleucos	5 3	AW, AE, BP, CN, WS AE, WS(2)	FEB(3), APR, DEC APR, JUL, SEP
Leucocarbo carunculatus onslowi	5	01(5)	MAY (5)
Stercorarius skua lonnbergi parasiticus	2 • 1 •	AW(2) AW	FEB, SEP FEB
Chlidonias hybrida	1	WS	JUN
Sterna spp	2	AW, BP	JAN, FEB
Procelsterna cerulea	1	AW	APR
. TOTAL	53		

#### TABLE 2: Seabirds of which 1 to 5 specimens were found dead in 1976. Coast and month of discovery given.

Species could not be identified by patroller

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The Black-fronted Tern *(Chlidonias hybrida)* found in Wellington South in June, is a new record for beach patrolling. It is included as a seabird on the strength of Sibson's (1970) statement that this species in winter commonly feeds offshore.

The Christmas Island Shearwater (*Puffinus nativitatis*) found near Dargaville in February (Crockett 1977) is the first time this species has been found in the New Zealand region. This find has been inadvertently excluded from the tables in this paper.

Miscellaneous birds recorded, but not considered to be seabirds, totalled 112. There were:---

18 Rock Pigeons, 11 Magpies, 10 Blackbirds, 9 South Island Pied Oystercatchers, 9 Black Swans, 5 Grey Ducks, 3 each of Mallard and Paradise Ducks, unidentified ducks, Harriers, California Quail, Godwits, Kingfishers, Song Thrushes and Starlings, two each of Variable Oystercatchers, Pheasants, Mynas and Pipits, and one each of Stewart Island Kiwi, White-faced Heron, Reef Heron, Goose, Western Weka, Buff Weka, Pukeko, Golden Plover, Pied Stilt, Wood Pigeon, Morepork, Skylark, Greenfinch, Redpoll and unidentified passerine.

#### ACKNOWLEDGEMENTS

The success of the Beach Patrol Scheme in 1976 is due to the 151 people listed below who are known to have taken part and all the others who took part but did not enter their names on the cards.

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\*Species or subspecies could not be identified by patroller

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G. Stilwell, R. R. Sutton, T. C. L. & E. M. Symmes, R. N. Thomas, S. Towle, C. R. Veitch, M. Wallis, D. M. & P. S. Witter, J. Warham, P. Watkins, G. Watson, G. & J. Wells, R. W. Sheeler, A. Wright, E. & O. E.

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#### LITERATURE CITED

CROCKETT, D. E. 1977. First 'Record of the Christmas Island Shearwater in New Zealand. Notornis 24 (4): 285-286.
IMBER, M. J.; BOESON, B. W. 1969. Seabirds found dead in New Zealand in 1964. Notornis 16 (1): 50-56.
OSNZ 1970. Annotated Checklist of the birds of New Zealand. Ornithological Society of New Zealand, Inc. Wellington: A. H. & A. W. Reed.
SIBSON, R. B. 1970 in: A Field Guide to the Birds of New Zealand by R. A. Falla, R. B. Sibson & E. G.Turbott. 2nd ed. London: Collins.

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# **A CORRECTION**

In PCB's appreciation of Sir Charles and Lady Fleming (*Notornis* 24: 290; December 1977), reference was made, by way of a proofreading lapse, to Lady Fleming's talents as a "home baker." Whereas this may be true in fact, what the writer intended was "home maker." We apologise for the confusion.