# SEABIRDS FOUND DEAD IN NEW ZEALAND IN 1977

## By C. R. VEITCH

During 1977, 3073 kilometres of coast were patrolled by 132 members of the Ornithological Society of New Zealand and their friends. 5542 dead seabirds and 135 non-seabirds were found. There were no major wrecks. Small, sometimes local, wrecks of Broad-billed Prions (Pachyptila vittata), Sooty Shearwaters (Puffinus griseus), Short-tailed Shearwaters (P. tenuirostris) and Fluttering Shearwaters (P. gavia) are noted. Unusual finds were one each of: Antarctic Petrel (Thalassoica antarctica), Fulmar Prion (Pachyptila crassirostris), Black-bellied Storm Petrel (Fregetta tropica), Grey Ternlet (Procelsterna cerulea) and Pitt Island Shag (Stictocarbo punctatus featherstoni) (a new record for beach patrolling).

#### INTRODUCTION

This paper records the results of the Ornithological Society of New Zealand's Beach Patrol scheme for 1977. The coastline of New Zealand is divided into 15 sections (Imber & Boeson 1969) with an additional grouping of "OI" for Outlying Islands which this year includes patrols from the Chatham Islands. This year there were patrols on all sections of coast except Fiordland. 440 Beach Patrol Cards and 21 Specimen Records Cards were filed.

Nomenclature follows the Annotated Checklist (OSNZ 1970), except where patrollers could not identify birds to a subspecific level and where some trinominals have not been used in the tables to save space.

### 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. Kilometres covered are the lengths of coast covered monthly; kilometres travelled are the total lengths of coast patrolled. Hence, if one kilometre of beach is patrolled three times in one month, then three kilometres have been travelled but only one kilometre covered.

The total distance travelled (3563 kilometres) is slightly above the average for the past nine years and the total number of seabirds found (5542) is slightly lower than average. The number of birds found per kilometre of coast covered (1.8) is the lowest since 1972.

This year there were no major wrecks. Several minor and localised wrecks occurred. The monthly and coastal distribution of the more common birds is given in Tables 2 and 3 and of the less common birds in Table 4.

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In February, large numbers of Fairy Prions (Pachyptila turtur) were found on Wellington West beaches. The young of this species leave the nest at the end of January (Falla 1970), and so mortality at this time can be expected.

In May, there was the usual mortality of Sooty Shearwaters (Puffinus griseus). During August, large numbers, presumably from the same wreck, were found on Mason's Bay, Stewart Island (Southland beach patrol district).

In July, Fluttering Shearwaters (Puffinus gavia) were found in high numbers on Auckland East beaches. The centre of this wreck moved around to Auckland West during August when dead birds of this species were found at a rate of 2.4 per kilometre. During the same period higher numbers than usual of Fluttering Shearwaters were also found on Taranaki, Bay of Plenty and Wellington South beaches. There is no apparent reason for this wreck.

Following severe westerly gales during late October and early November, high numbers of Broad-billed Prions (*Pachyptila vittata*) were found on Southland beaches. There were also several reports of live Broad-billed Prions being found in inland Southland (M. L. Barlow, pers. comm.).

Also in November, Short-tailed Shearwaters (Puffinus tenuirostris) were found to be at least three times more numerous than usual on Auckland West beaches due, it appears, to persistent west to northwest winds during the latter half of October and early November. This high, in addition to slightly increased numbers in January and December, made the total for the year the highest since 1968.

It is notable that with the relative absence of south-west winds during October and November there was no marked increase in numbers of Sooty Shearwaters on North Island west coast beaches as has been observed in other years (Veitch 1977).

Throughout the year the numbers of Spotted Shags (Stictocarbo punctatus) found on Canterbury South beaches continued to be high, the peak being 32 birds on 5 km of beach during May. Many of these birds were reported as shot.

The Antarctic Petrel (*Thalassoica antarctica*) found on Muriwai Beach (AW) in November was the sixth specimen of this species found during beach patrols. Previous records are 1973, two birds (AW & SD); 1975, three birds (WW, 2 & AE).

The Fulmar Prion (Pachyptila crassirostris) was found on Petone Beach, in Wellington Harbour, during September. Previous records are 1970, three birds (AW, 2 & WW); 1971, two birds (CS); 1973, two birds (CN).

This is the third time that a Black-bellied Storm Petrel (Fregetta tropica) has been found on the New Zealand mainland. This specimen was on Oreti Beach, Southland, in November. Previous records are of single birds in 1968 (WS) and 1975 (WW).

TABLE 1 — Numbers of dead seabirds recorded and kilometres patrolled in 1977.

COAST	CODE	:						MONTH	1						т	TALS	BIRDS/KM
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	KH	BIRDS	/COAST
AUCKLAND WEST	AW	KM BIRDS	167 262	143 249	116 130	64 129	160 645	91 31	114 116	203 657	92 32	88 129	231 424	274 342	1743	3146	1.80
TARANAKI	TA	KM BIRDS	21	22 26	7 2	19 24	12	2	20	11 12	4	2	2	1	123	103	0,84
WELLINGTON WEST	WW	KM BIRDS	4 5	27 31.4	_	1	17 91	7 1	2 1	1	14 20	14 14	12 12	7	102	471	4.44
WESTLAND	WD	KM BIRDS	1	244	_	-	-		=	-	-	-	-	1	2		
AUCKLAND EAST	ΑE	KM	109	23	39	35	47	45	62	37	40	14	28	36	515	1	0.50
BAY OF PLENTY	ВР	BIRDS KM	236 7	33 15	23 15	10 2	22 3	21 14	179 16	79 9	13	4 21	25 2	40 11	117	685	1.33
EAST COAST NORTH IS	EC	BIRDS KM	4	2	8 6	0 4	3	3	28	33 2	0	11 4	1	7 -	16	100	0.85
WAIRARAPA	WA	BIRDS KM	5	_	1 -	1	4	- 35	_	3	_	2	_	6	50	7	0.44
CANTERBURY NORTH	CN	BIRDS KM	1	-	2	1	2 10	5 13	-	10	_	_	_	3 11	47	11	0.22
CANTERBURY SOUTH	cs	BIRDS KM	7	- 5	6 7	1 6	17 5	19 4	- 5	48 4	5	5	- 6	7 4	63	98	2.09
OTAGO	ОТ	BIRDS KM	42	9	16	21	54 11	21	22	9 -	3	14	6 -	3	11	220	3.50
SOUTHLAND	SD	BIRDS	- 14	-	- 8	14	17	- 15	- 8	- 2	- 8	-	1.3	- 7	89	17	1.55
WELLINGTON SOUTH	ws	BIRDS	7	17	15 25	7	- 24	17 10	0 15	78 11	1 22	- 4	165	2 14	155	292	3.28
NORTH COAST SOUTH IS		BIRDS	1	28	9	6	200	18	13	13	25	3	3	24	17	342	2.21
		BIRDS	14 12	-	-	-	9	-	-	=	_	-	_	-	19	21	1.24
OUTLYING ISLANDS	01	KM Birds	_	6 <b>1</b> 0	_	13 18	_	_	_	_	_	_	_	_	19	28	1.47
TOTAL KM TRAVELLED			371	270	252	21.1	385	255	297	330	227	177	354	434	3563		
TOTAL KM COVERED TOTAL BIRDS			352 593	258 671	225 210	165 221	296 1065	236 137	242 366	290 933	187 97	152 177	298 635	372 437	3073	5542	
BIRDS/KM COVERED/MOR	ΝТН		1.68	2.60	0.93	1.34	3.60	0.58	1.51	3.22	0.52	1.16	2.13	1.17			1.8

Coastal distribution of the more common seabirds found dead in 1977. TABLE 2 —

TOTAL BIRDS	14	246	21	11	16	16	15	20	40	35	38	20	216	135	14	476	57	192	1170	353	1081	28	52	183	145	24	56	190	569	245	49	5405
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ΑM	1	111	6	Μ	11	11	6	52	24	53	32	11	71	17	m	196	31	150	795	248	733	13	9	122	118	16	18	16	26	146	25	3096
SPECIES OR SUBSPECIES	Megadyotes anticodes	Eudyptula minor	Diomedea spp*	exulans	cauta subspp*	cauta	Macronectes giganteus	Daption capensis	Pterodroma macroptera	lessoni	inexpectata	C00ki	Pachyptila spp*	vittata	belcheri	ナロオロオ	Puffinus carneipes		er i se'us	tenuirostris	gavia	assimilis	Pelagodroma marina	Pelecanoides urinatrix	Sula bassana	Phalacrocorax carbo	Varius	Stictocarbo p. punctatus	Larus dominicanus	novaehollandiae	Sterna striata	TOTALS

\*Species or subspecies could not be identified by patroller.

TABLE 3 — Monthly distribution of the more common seabirds found dead in 1977.

SPECIES OR						MON	ITH						TOTAL
SUBSPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	BIRDS
Megadyptes antipodes	_	_	1	1	7	3	1	_	_	_	1		14
Eudyptula minor	58	47	9	9	26	7	13	19	9	4	25	20	246
Diomedea spp*	6	4	1	5	2	1	_		_	1	1	_	21
exulans	1	2	4	_	1	2	-	_	_	1	_		11
cauta subspp*	4	2	_	1	4	_	_	1	_	4		_	16
cauta	_	_	_	_	1	1	_	3	1	-	6	4	16
Macronectes giganteus	_		2	_	_	_	2	. 2	5	3	1	_	15
Daption capensis	2	3	_	2	1		3	7	2	9	11	10	50
Pterodroma macroptera	7	6	1	_	2	_	6	7	_	1	8	2	40
lessoni	3	2	1	3	2	1	4	3	1	2	7	6	35
inexpectata	4	3	_	1	15	_	_	٠.	_	_	1	14	38
cooki	3	4	3	5		_	-	_	_	1	2	2	20
Pachyptila spp*	9	101	1	2	21	2	4	10	7	20	27	12	216
vittata	8	1	_	_		_	_	_	_	9	114	3	135
belcheri	9	1		_	2		_	2	_	_	_	_	14
turtur	25	209	2	3	30	5	43	63	9	22	50	15	476
Puffinus carneipes	18	20	7	_		-	1	-	_	_	6	5	57
bulleri	42	29	6	7	5	1	1			12	20	69	192
griseus	116	56	21	20	711	30	2	55	_	12	88	59	1170
tenuirostris	63	13	1	9	37	1	_	_	_	23	132	74	353
gavia	83	73	20	15	18	5	189	586	18	11	33	30	1081
assimilis	4	_	_		1	1	2	5	_	4	6	5	28
Pelagodroma marina	9	_	2	_	2	1	1	1	_	2	4	3	25
Pelecanoides urinatrix	17	7	1	2	12	4	37	68	4	2	15	19	188
Sula bassana	39	9	4	8	5	3	7	20	4	10	19	17	145
Phalacrocorax carbo	_	_	1	1	1	_	1	1	_	2	8	9	24
varius	1	1	1	_	1	2	1	1	_	3	7	8	26
Stictocarbo p. punctatus	7	5	8	8	68	32	14	33	3	7	2	3	190
Larus dominicanus	23	39	26	32	42	17	11	13	20	8	11	27	269
novaehollandiae	12	1.4	67	69	25	9	9	22	5	2	6	5	245
Sterna striata	5	2	11	4	4	2	. 4	3	1	1	7	5	49
		-			-		1	=				-	
TOTALS	578	653	201	207	1046	130 -	J 356	925	89	176	618	426	5405

<sup>\*</sup>Species or subspecies could not be identified by patroller.

TABLE 4 — Seabirds of which 1 to 10 specimens were found dead in 1977.

SPECIES OR SUBSPECIES	NUMBER F	OUND COAST(S)	MONTH(S)
Eudyptula albosignata	8	AE, CN, CS(3), OT, WS(2),	JAN, FEB(2), MAY(2), JUN, AUG, DEC.
Eudyptes pachyrhynchus subspp*	1	cs.	APR.
pachyrhynchus	2	AW.SD.	NOV(2).
sclateri	1	OT.	MAY.
Diomedea epomophora	- 5	EC,WS(4).	MAR, MAY(2), DEC(2).
melanophris	9	AW(6),EC,SD(2).	FEB(2), APR, MAY(2), AUG(2), NOV, DEC.
chrysostoma	10	AW(6), TA, AE, WS(2).	JAN(3), FEB, MAY(2), AUG(3), SEP.
bulleri	4	AW(2),SD,01.	MAR, APR, MAY, JUN.
cauta salvini	1	ws.	SEP.
Phoebetria palpebrata	2	AW(2).	FEB(2),
Thalassoica antarctica	1	AW.	NOV.
Pterodroma spp*	2	AW(2).	MAR, NOV.
brevirostris	2	AW(2).	MAY, OCT.
pycrofti	1	AE.	JAN.
h. nigripennis	2	AW(2).	FEB, DEC.
Halobaena caerulea	5	AW(3), WS, 01.	APR, JUL, SEP, NOV, DEC.
Pachyptila salvini	7	AW(2), AE(3), SD, WS.	JAN(2), FEB, APR, MAY, SEP, NOV.
desolata	.7	AW(2), AE(3), BP(2).	APR, JUL(4), NOV(2).
crassirostris	1	WS.	SEP.
Procellaria cinerea	5	AW, TA, BP(2), CS.	JAN, MAR, JUL(2), SEP.
parkinsoni	4	AW, AE(3).	FEB, MAR, MAY, JUN.
westlandica	4	AW(3),NS.	JAN, SEP(2), DEC.
aequinoctialis	3	AW(2).WS.	JAN, FEB, MAY.
Puffinus spp*	6	AW(3),TA,AE,WS.	JAN, MAR(2), JUL(2), DEC.
huttoni	10	AW(2),TA(3),WW,CN(3),WS.	JAN, FEB(2), APR, MAY, AUG, NOV(2), DEC(2).
Garrodia nereis Fregetta tropica	1	AW.	NOV.
Phalacrocorax spp*	1	SD.	NOV.
rnalacrocorax spp* sulcirostris	1	AE.	JUL.
brevirostris	1	AE.	JUN.
Leucocarbo carunculatus chalconotus	4 6	BP·CN·OT(2).	MAY(2).JUN.AUG.
nnsiowi		OT,SD(5).	MAR, APR(2), MAY, JUN, NOV.
Stictocarbo punctatus featherstoni	2	01(2).	FEB.APR.
Stercorarius parasiticus	1	01.	APR.
Larus bulleri	3	AW(3).	JAN, FEB(2).
Hydroprogne caspia	9	CS(2),SD(7).	JAN, FEB, MAR, APR(2), JUN, NOV(3).
Procelsterna cerulea	4 1	AW(3),AE.	JAN, APR, MAY, DEC.
• "		AE.	FEB.
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\*Species or subspecies could not be identified by patroller.

The Grey Ternlet (Procelsterna cerulea), found at Pataua (AE) in February, is the third record for this species. Although not numerous, this species is regularly seen near northern off-shore islands. Previous records are from Auckland East in 1974 and Auckland West in 1976.

The Pitt Island Shag (Stictocarbo punctatus featherstoni) is a new record for beach patrolling but, considering the number of patrols now done in the Chatham Islands, not unexpected.

Miscellaneous birds recorded but not considered to be seabirds totalled 135. These were:—

20 Blackbirds, 14 Mallard Ducks, ten each of Magpies (both subspecies) and Rock Pigeons, nine Black Swans, seven Grey Ducks, five Starlings, four each of Bar-tailed Godwits, Pukekos, Pheasants and Song Thrushes, three each of South Island Pied Oystercatchers, Pied Stilts, unidentified ducks, Mynas, Yellowhammers and Skylarks, two each of White-faced Herons, Banded Dotterels, Spine-tailed Swifts, Brown Teal, NZ Pigeons and Chaffinches and one each of Stewart Island Kiwi, Variable Oystercatcher, NZ Dotterel, Wrybill, Cattle Egret, Shoveler Duck, Welcome Swallow, Oriental Cuckoo, Kingfisher, Harrier, California Quail, Tui, Greenfinch and House Sparrow.

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## AUSTRALIAN SIGHT RECOVERY OF A COLOUR-BANDED BANDED DOTTEREL

During and since the 1977-78 breeding season, many Banded Dotterels (Charadrius bicinctus) have been colour-banded by Mary Bomford and Ray Pierce on the Cass River delta, Lake Tekapo, as part of their behavioural and population studies. On 25 November 1977, a nesting adult female was trapped and colour-banded with its own colour combination. In 1978, this bird returned to nest at the same part of the delta, where on 11 November 1978 Peter Dann found it with two chicks, at least one of which later fledged. The last sighting in the 1978-79 season was on 27 November.

While cannon-netting waders in southern Victoria with the Victorian Wader Study Group, Peter Dann saw this colour-banded female on 17 June 1979. It was in a flock of 150 Banded Dotterels and several Red-capped Dotterels (C. alexandrinus ruficapillus) roosting during high tide in a saltmarsh at Point Wilson, 46 km south-west of Melbourne and about 2000 km from the place of banding in New Zealand. The bird showed noticeably paler bands than most of the other adults in the flock. At this time, the juveniles had not acquired The flock remained in the area for several days, breeding plumage. but the female was not seen again.

During the 1979 winter and early spring, Ray Pierce kept a close check on Banded Dotterels returning to the Cass Delta. At that time of year all dotterels foraged either at the rivermouth or at a nearby muddy inlet of Lake Tekapo, and so they were easily checked for colour bands. The colour-banded female was not present on all dates leading up to and including 18 July. The next check was on 21 July when the bird (with the unusually pale breast and neck bands retained throughout the breeding season) was found at the rivermouth actively defending a small feeding territory. Three further sightings up to 21 August involved the bird at the rivermouth (once) and at the muddy inlet (twice). By 9 September, it had occupied a territory in the same area as the previous two years.

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