

SEA BIRDS FOUND DEAD IN NEW ZEALAND IN 1963

ABSTRACT

Beach Patrols during 1963 covered a total distance of 852 miles and produced 1535 birds (64 species). Species are tabulated by month of occurrence and by the coastal zones in which they were found.

Unusual species include *Eudyptes pachyrhynchus atratus*, *Procellaria cinerea*, *P. parkinsoni*, *P. westlandica*, *Pterodroma hypoleuca nigripennis*, *Oceanites oceanicus*, *Fregetta tropica* (Campbell Island), *Phaethon rubricauda*, *Sterna vittata bethunei* (Campbell Island), and *S. paradisaea*.

INTRODUCTION

This account corrects and expands the brief preliminary report already published (Boeson, 1964), and follows the format of the 1962 report (Bull and Boeson, 1963).

Fifty members took part in this year's work and sent in 390 Beach Patrol cards covering 852 miles of coastline. The cards record the finding of 1535 birds (64 species); a further 22 specimens were found on Campbell Island.

There were no major "wrecks" during the year but even so the number of birds found is 168 more than in 1962.

RESULTS

Distribution of Patrols

Table 1 shows the length of beach patrolled each month for each of the 15 zones covered. However, in 4 of these zones, patrols covered less than 10 miles so the calculation of "Birds-per-mile" was unjustified. It is encouraging to see a marked increase in the South Island mileages; for example, this year 50 miles were patrolled in Southland compared with 8 miles in 1962, and again, 146 miles in Otago this year as against 90 in 1962. No patrols were reported from Hawke Bay, West Nelson or Fiordland. Patrols from Campbell Island are not included in Table 1 but the specimens are recorded in Tables 2 and 3. Bay of Plenty, North Canterbury and Otago were the only zones with patrols for every month of the year (Table 1). With only four months and a mileage of 17 miles, Auckland East provided the spectacular figure of 7.0 birds per mile.

Kinds of Birds Found

Species of penguins, albatrosses, petrels and shearwaters found in 1963 are shown on Table 2 which also records their monthly occurrence. *Puffinus griseus* (491) and *Pachyptila turtur* (233), were the most abundant species, with *Eudyptula minor* (94) and *Puffinus g. gavia* (91) coming a close third and fourth. Unusual species found were: *Eudyptes pachyrhynchus atratus*, *Procellaria cinerea*, *P. parkinsoni*, *P. westlandica*, *Pterodroma hypoleuca nigripennis* and *Oceanites oceanicus*.

"Miscellaneous species" consisted of the following: *Phaethon rubricauda* (1), *Sula bassana* (9), *Phalacrocorax carbo* (1), *P. varius* (4), *P. sulcirostris* (3), *P. chalconotus* (12), *P. punctatus* (36), *Notophox novae-hollandiae* (1), *Branta canadensis* (1), *Cygnus atratus* (1), *Anas superciliosa* (1), *Circus approximans* (2), *Haematopus ostralegus* (3), *Himantopus h. leucocephalus* (3), *Stercorarius skua* (2), *Larus dominicanus* (147), *L. bulleri* (15), *L. novaehollandiae* (70), *Hydroprogne*

caspia (2), *Sterna vittata bethunei* (1), *S. striata* (26), *S. paradisaea* (1), *Columba livia* (4), *Alauda arvensis* (1), *Passer domesticus* (1), *Sturnus vulgaris* (1) and *Corvus species* (1). The skuas and the Antarctic Tern were found on Campbell Island as were two of the Black-backed Gulls and three of the Red-billed Gulls.

Seasonal Distribution

The autumn-early winter decline in birds-per-mile is again reflected in Table 1. It is most interesting to note that as in the 1939-59 Report (Bull and Boeson, 1961) and the 1962 Report (Boeson, 1964), the appearance, in large numbers, of *Puffinus griseus* in the November, December, January periods. The relatively high birds-per-mile figures in January (4.4) and November (3.4) were influenced by an increase in these species.

Differences Between Zones

Table 3 shows the zones in which the various species were found. The limits of the various zones are illustrated by Fig. 1, in Bull and Boeson, 1963. Auckland East, with only 17 miles patrolled produced 7.0 birds-per-mile while the 22 miles in South Canterbury produced 3.3 birds-per-mile, and again, the 61 miles in Wellington South produced 0.5 birds-per-mile compared with Taranaki with exactly the same mileage showed a return of 1.7 birds-per-mile. These differences are probably the effect of coastal aspect in relation to the weather experienced during the year.

Discussion

The mean number of birds found per mile in 1963 (1.8) is almost the same as that in 1962 (1.9) even though 121 more miles of beach were patrolled this year. The number of people taking part in the scheme exceeded that of 1962 by 9 patrollers. There were no major "wrecks" during the year and with this in mind the collection of 1535 specimens seems to be a very creditable effort.

It must be stressed once again that "nil" reports play a most important part in the overall picture.

ACKNOWLEDGEMENTS

Thanks are due to the following members who took part in this year's patrols: J. H. Allan, I. G. Andrew, J. W. Bain, C. E. Barlow, Mrs. M. L. Barlow, J. A. Bartle, B. D. Bell, A. Blackburn, B. W. Boeson, P. C. Bull, D. E. Calvert, C. N. Challies, D. E. Crockett, R. Crockett, N. Cudby, Miss M. Davis, D. G. Dawson, A. T. Edgar, B. M. Fitzgerald, R. A. Fordham, Miss A. J. Goodwin, P. C. Harper, B. D. Heather, M. Hodgkins, M. J. Imber, J. R. Jackson, J. Jenkins, J. L. Kendrick, S. R. Kennington, F. C. Kinsky, N. J. Ledgard, K. H. Miers, M. G. Macdonald, D. McGrath, Mrs. M. McGrath, Mrs. H. M. McKenzie, H. R. McKenzie, N. J. Nilsson, J. O'Brien, W. Pengelly, W. T. Popplewell, K. Rowe, R. B. Sibson, J. W. Sibson, R. Smart, C. R. Veitch, D. M. Walter, R. R. Wiblin, M. J. Williams and A. Wright.

Once again I am very grateful to Dr. P. C. Bull for his co-operation and help especially in reading the manuscript and making worthwhile suggestions.

BULL, P. C., BOESON, B. W., 1961: Preliminary Analysis of Records of "Storm-Killed Sea Birds from New Zealand, 1939-59. *Notornis* 9: 185-199.

BULL, P. C., BOESON, B. W., 1963: Sea Birds Found Dead in New Zealand in 1961. *Notornis* 10: 265-277.

BOESON, B. W., 1964: Sea Birds Found Dead in New Zealand in 1962. *Notornis* 10: 404-411.

BOESON, B. W.: Preliminary Report on Beach Patrol Scheme — for year 1963. *Notornis* 11: 52.

TABLE 1: MILES PATROLLED AND BIRDS FOUND ON DIFFERENT COASTS

Coastline			Number of Miles Patrolled Each Month — January - December												Total Miles	Total Birds	* Birds Per Mile
Name	Code No.	Code Letters	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.			
North Cape	1	NC	1												1	4	—
Auckland East	2	AE	7				2		7					1	17	119	7.0
Bay of Plenty	3	BP	10	6	10	10	7	6	11	8	4	11	10	12	105	50	0.5
East Cape	4	EC		3	3										6	—	—
Wairarapa	6	WA					3								3	—	—
Wellington South	7	WS	2		5	2	3	6	7	7	4	4	9	12	61	28	0.5
North Canterbury	8	CN	5	14	15	11	6	9	6	6	7	6	5	13	103	135	1.3
South Canterbury	9	CS	3	6	5	3				1				4	22	73	3.3
Otago	10	O	4	7	4	8	23	9	9	23	22	12	10	15	146	144	1.0
Auckland West	11	AW	9	7			1	1	1	7		1		2	28	146	5.2
Taranaki	12	T	10	5	6	5		1	1	1	3	1	10	18	61	102	1.7
Wellington West	13	WW	10	19	20	2	14	52	7	13	13		62		212	540	2.6
North Coast South Is.	14	NCS	2	4		7	4		5		3		4		29	82	2.8
Westland	16	W		2			1						5		8	1	—
Southland	18	S	19		8	10		3		3		4		3	50	111	2.2
Total Miles	---	---	82	73	76	58	64	87	53	69	56	39	115	80	852		
Total Birds	---	---	359	145	79	104	45	59	21	119	69	60	391	84		1535	
Birds per Mile	---	---	4.4	2.0	1.0	1.8	0.7	0.7	0.4	1.7	1.2	1.5	3.4	1.1			1.8

* The table is based on a total of 1535 birds; a further 22 birds were excluded from the table (see text).

TABLE 2: List of Species Found Each Month

Months Birds Found:	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Specimens
Species of Birds													
<i>Megadyptes antipodes</i> ----		1		6	1					1			9
<i>Eudyptula minor</i> ----	28	6	5	6		4	2	6	1	2	28	6	94
<i>E. albosignata</i> ----	1	2	4	1						1			9
<i>Eudyptes crestatus</i> ----		1											1
<i>E. pachyrhynchus atratus</i> ----	1												1
<i>E. p. sclateri</i> ----	1	1	1										3
<i>Diomedea exulans</i> ----					1								1
<i>D. epomophora</i> ----		1			1			1					3
<i>D. melanophris</i> ----									1		1		2
<i>D. chrysostoma</i> ----		1			1				1				3
<i>D. bulleri</i> ----					1		1						2
<i>D. cauta</i> ----		1											1
<i>D. c. salvini</i> ----			1					1					2
<i>Diomedea sp.*</i> ----				1	1								2
<i>Macronectes giganteus</i> ----	3	1						1			2	1	8
<i>Daption capensis</i> ----	1		1				1	3	1		5		12
<i>Pachyptila vittata</i> ----	12	6	1						1		1	1	22
<i>P. salvini</i> ----	1					1	1						3
<i>P. belcheri</i> ----								2	1				3
<i>P. turtur</i> ----	11	24	8	3	1	5	2	37	7	2	123	10	233
<i>Pachyptila sp.*</i> ----	11		2			2	1	1	10		7		34
<i>Puffinus carneipes</i> ----	6	1			2	1	1		1		3	3	18
<i>P. bulleri</i> ----	8	8	4		3	1				1	6	1	32
<i>P. griseus</i> ----	139	56	26	38	5	4		2	8	35	152	26	491

TABLE 2 (Continued)

Months Birds Found:	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Specimens
Species of Birds													
<i>P. tenuirostris</i> ----	33	12	5	4	4	4	2	16	4	4	2	1	6
<i>P. gavia gavia</i> ----	2			1							3		91
<i>P. g. huttoni</i> ----		3	1		1	1			2	1	7	2	18
<i>P. assimilis</i> ----	3	1	1					1		1	4		10
<i>Procellaria cinerea</i> ----													1
<i>P. parkinsoni</i> ----						1				1			2
<i>P. westlandica</i> ----	1												1
<i>Pterodroma macroptera</i> ----	16							1	1	1		1	19
<i>P. lessoni</i> ----						2					2		5
<i>P. inexpectata</i> ----	8	1	1			1						3	13
<i>P. brevirostris</i> ----													1
<i>P. cooki</i> ----	1	1											2
<i>P. hypoleuca nigripennis</i> ----			1										1
<i>Pterodroma sp.*</i> ----						1					1		1
<i>Oceanites oceanicus</i> ----											1		1
<i>Pelagodroma marina</i> ----													3
<i>Fregata tropica</i> ----	2												1
<i>Pelecanoides urinatrix</i> ----	13	3		1	2	1	1	7	2		8	2	40
Miscellaneous sp.†	57	28	18	44	22	30	9	40	32	10	35	27	352
TOTALS	359	160	80	105	46	59	21	119	73	60	391	84	1557

* Too fragmentary to allow specific identification.

† Other than petrels or penguins.

TABLE 3: List of Species Found on Different Coasts (Zones)

Index No. of Zone†	1	2	3	7	8	9	10	11	12	13	14	16	18
Index Letters of Zone	NC	AE	BP	WS	CN	CS	O	AW	T	WW	NCS	W	S
Campbell Island													
Species of Birds													
<i>Megadyptes antipodes</i>	1				1	2	4					1	9
<i>Eudyptula minor</i>		6	4	2	3		2	8	9	42	3	15	94
<i>E. albosignata</i>					5	4							9
<i>Eudyptes cristatus</i>	1												1
<i>E. pachyrhynchus atratus</i>													
<i>E. p. sclateri</i>	1											1	3
<i>Diomedea exulans</i>	1											2	1
<i>D. epomophora</i>										2			3
<i>D. melanophris</i>					1		1			1			3
<i>D. chrysostoma</i>	1			1									2
<i>D. bulleri</i>				2									1
<i>D. cauta</i>							1						2
<i>D. c. salvini</i>							2						2
<i>Diomedea sp.*</i>							1			1			2
<i>Macronectes giganteus</i>	1	1			1	1		2		2			8
<i>Diapton capensis</i>		1		4		1	1		2	3			12
<i>Pachyptila vittata</i>					1	14	1			3		3	22
<i>P. salvini</i>				1						1		1	3
<i>P. belcheri</i>								1		2			3
<i>P. turkur</i>	1	1	2	2	12	2	3	40	8	148	8	6	34
<i>Pachyptila sp.*</i>					1					23		9	18
<i>Puffinus carneipes</i>		7	7				1		3				233
<i>P. bulleri</i>		5	3	1		5		4	1	13			32
<i>P. griseus</i>	2	39	7	4	59	13	13	50	19	203	51	29	491

TABLE 3 (Continued)

Index No. of Zone†	1	2	3	7	8	9	10	11	12	13	14	16	18	Total Birds
Index Letters of Zone	NC	AE	BP	WS	CN	CS	O	AW	T	WW	NCS	W	S	
Campbell Island														
Species of Birds														
<i>P. tenuirostris</i>			1	3	8	2	1	1	1	2				6
<i>P. gavia gavia</i>		27	8		4	3		17	1	18	7			91
<i>P. g. huttoni</i>										10	1			18
<i>P. assimilis</i>	4							1		5	1			10
<i>Procellaria cinerea</i>							1							1
<i>P. parkinsoni</i>								1		1				2
<i>P. westlandica</i>														1
<i>Pterodroma macroptera</i>	15		1	1				2	1					19
<i>P. lessoni</i>								1		3				5
<i>P. inexpectata</i>								1		2			10	13
<i>P. brevirostris</i>								1		1				1
<i>P. cooki</i>	1							1						2
<i>P. hypoleuca nigripennis</i>										1				1
<i>Pterodroma sp.*</i>										1				1
<i>Oceanites oceanicus</i>										1				1
<i>Pelagodroma marina</i>			2							1				3
<i>Fregata tropica</i>			8	2				6	4	12				1
<i>Pelecanoides urinatrix</i>	3	1	4	6	5	39	25	112	11	53	11	1	34	40
Miscellaneous sp.†	8	9	6											352
TOTALS	22	4	119	50	28	135	73	144	146	102	82	1	111	1557

* See Table 1.

* Too fragmentary to allow specific identification.

† Other than petrels or penguins.