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Bird ringing on Marion Island, 1975-1977

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This paper summarises ringing activities on Marion Island between May 1975 and May 1977. Totals of 1119 birds and 21 species were ringed during this period (Table 2). Ringing done in previous years was described by Berruti *et al.* (1975).

Sixteen foreign-ringed birds were recovered or controlled (released alive) on Marion Island during the two years under review (Table 1). To date, 12 King Penguins, *Aptenodytes patagonicus*, ringed on Possession Island, Îles Crozet (46°25'S, 51°45'E) have been found on Marion Island, all within two years of having been ringed. Eleven of these birds were moulting (one found dead) and one was found breeding (with a chick). In addition, a Wandering Albatross, *Diomedea exulans*, BS 0777, ringed as a pullus on Possession Island, was found breeding on Marion Island. A certain amount of

interbreeding thus occurs between the Wandering Albatross populations, and possibly the King Penguin populations, of Marion and Possession Islands. The data in Table 2 also confirm that some Wandering Albatrosses hatched or breeding on Marion Island frequent Australian coastal waters, perhaps less so than those from South Georgia (Tickell & Gibson, 1968).

Apart from the 10 birds reported by Berruti *et al.* (1975), no other birds ringed on Marion Island have been reported elsewhere. Two hundred and forty birds ringed on Marion Island prior to May 1975 were subsequently recovered there, including a Wandering Albatross ringed 23 years previously (Table 3). In 1974, 17 Northern Giant Petrels, *Macronectes halli*, were ringed, all breeding adults. Two years later,

Table 1

Recoveries of foreign ringed birds recovered on Marion and Prince Edward Islands, 1976-1977

Species	Ring no.	Age at ringing	Sex	Ringing date	Recovery date	Ringing location	Status
Wandering Albatross	BS 0777	Pullas		18.9.68	19.1.77	Possession Island, Crozets 46°25'S, 51°45'E	Controlled, breeding
Wandering Albatross	BS 6654	Adult	—	25.1.68	12.2.77	Possession Island, Crozets	Controlled, non-breeding
Wandering Albatross	BS 5815	Adult	3	12.3.73	20.2.77	Possession Island, Crozets	Controlled, non-breeding
Wandering Albatross	BS 5802	Pullus	_	26.2.73	22.2.77	Possession Island, Crozets	Controlled, non-breeding
Wandering Albatross	140-39057	Adult	Ŷ	18.9.71	22.2.77	Off New South Wales 33°58'S, 151°16'E	Controlled, breeding
Wandering Albatross	140-25756	Adult	₫.	1.8.65	22.2.77	Off New South Wales 33°58'S, 151°16'E	Controlled, breeding
Wandering Albatross	140-35105	Adult	—	1.8.71	12.12.76	Off New South Wales 34°18'S, 150°58'E	Controlled, breeding
Wandering Albatross	140-39256	Adult		10.8.69	28.12.76	Off New South Wales 33°58'S, 151°20'E	Controlled, breeding
Wandering Albatross	140-39430	Adult		4.8.73	28.7.76	Off New South Wales 34°18'S, 150°58'E	Controlled, breeding
King Penguin	TA 2951	Adult	_	25.1.76	11.1.77	Possession Island, Crozets	Found dead
King Penguin	TA 2381	Pullus		17,12.75	7.1.77	Possession Island, Crozets	Controlled, moulting
King Penguin	TA 2637	Adult		21.12.75	7.1.77	Possession Island, Crozets	Controlled, moulting
King Penguin	TA 2521	Pullus		8.12.75	11.1.77	Possession Island, Crozets	Controlled, moulting
King Penguin	TA 2163	Adult	_	9.2.75	30.11.76	Possession Island, Crozets	Controlled, moulting
King Penguin	TA 2575	Pullus	_	17.12.75	19.12.76	Possession Island, Crozets	Controlled, moulting
King Penguin	TA 4465	Adult	-	17.11.76	15.7.77	Possession Island, Crozets	Controlled, breeding (& chick)

Birds ringed on Marion Island, May 1975-May 1977 with grand total of all birds ringed since October 1951

	May 1	975–Ma	October 1951- May 1977	
Species	Pullus	Full grown	Total	Grand Total
Rockhopper Penguin				
Eudyptes chrysocome				76
Macaroni Penguin				
Eudyptes chrysolophus	—	—	_	54
Wandering Albatross		20	40.7	1.005
Diomedea exulans	440	47	487	1415
Sooty Albatross	23		22	313
Phoebetria fusca	33	<u> </u>	33	313
Light-mantled Sooty				
Albatross	2	I	3	18
Phoebetria palpebrata Southern Giant Petrel	<u> </u>	1	2	10
Macronectes giganteus		10	10	25
Northern Giant Petrel	_	10	10	20
Macronectes halli	8	7	15	42
Giant Petrel sp.		•		
Macronectes sp.			_	301
Soft-plumaged Petrel				
Pterodroma mollis	<u></u>	11	LI I	14
Great-winged Petrel				
Pterodroma macroptera	1	13	14	17
Kerguelen Petrel				
Pterodroma brevirostris	24	30	54	82
Blue Petrel				
Halobaena caerulea		13	13	63
White-chinned Petrel				
Procellaria aequinoctiulis	—	18	18	22
Grey Petrel				
Adamastor cinereus		3	3	4
White-headed Petrel				
Pterodroma lessoni		1	1	1
Salvin's Prion				
Pachyptila salvini		145	145	355
Fairy Prion		-		_
Pachyptila turtur	—	i	ł	1
Common Diving Petrel		•	2	20
Pelecanoides urinatrix		2	2	38
South Georgian Diving				
Petrel			11	23
Pelecanoides georgicus		11	11	23
Kelp Gull Larus dominicanus	.	6	6	18
	.	0	ø	10
Great Skua Stercorarius skua lonnberg	i 29	25	54	324
Lesser Sheathbill	47	23	54	524
Chionis minor	121	117	238	448
	141	117	00,2	
			1119	3654

14 (82%) were controlled when breeding, implying an annual adult mortality of 9 per cent.

It is remarkable that not one of the 574 burrowing petrels (of 10 species) ringed before May 1976 has ever been recovered. Most of these birds were captured randomly when they collided with buildings on misty nights. Regular and sustained capturing of birds near known breeding areas is suggested as an alternative method of monitoring a marked population of burrowing petrels. Overall, these recovery data indicate that only species receiving regular attention from resident biologists, or long-lived, long-distance migrants are likely to yield valuable data in return for ringing effort. We recommend that ringing activities on sub-Antarctic islands be concentrated on such species.

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Table 3

Birds	ringed and	l recovered	l on Marior	ı Island
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Species	Numbers ringed prior to May 1975*	Numbers (and % in brackets) controlled or recovered prior to May 1977		
Rockhopper Penguin	76	8	(11)	
Macaroni Penguin	54	7	(13)	
Wandering Albatross	928	66	(7)	
Sooty Albatross Light-mantled Sooty	280	45	(16)	
Albatross Giant petrels	15	2	(13)	
(2 species) Burrowing petrels	343	19	(6)	
(10 species)	347	0	(0)	
Kelp Guil	12	1	(8)	
Great Skua	270	5	(2)	
Lesser Sheathbill Total	210 2535	87	(41)	

*from Berruti et al. (1975).

Table	A .	
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Recoveries of foreign ringed birds recovered on Marion and Prince Edward Islands, 1951-1975

Species	Ring no.	Age	Sex	Ringing date	Recovery date	Ringing location	Status
Wandering Albatross	140-03543	Full-grown	_	6.8.61	16.3,75	Off New South Wales 34°20'S, 150°50'E	Controlled, breeding
King Penguin	TA 1554	Full-grown	—	13.4.74	2.11.74	Île Aux Cochons, Crozets 46°06'S, 50°15'E	Controlled, moulting
King Penguin	TA 1147	Pullus	—	6.11.73	26.11.74	Possession Island, Crozets 46°25'S, 51°45'E	Controlled, moulting
King Penguin	TA 1224	Pullus		8,11.73	24.11.73	Possession Island, Crozets	Controlled, moulting
King Penguin	TA 1300	Pullus	_	23.11.73	28,1.75	Possession Island, Crozets	Controlled, moulting
King Penguin	TA 0168	Pullus	—	29.11.71	2.11,74	Possession Island, Crozets	Controlled, moulting

This table details the original ringing data which were not available to Berruti et al. (1975).