

Report on bird banding in New Zealand 1994/1995

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Abstract

During the 1994/95 banding year 18,490 birds of 100 species were banded and 87 previously banded birds were re-banded, bringing the grand total of individual birds banded in New Zealand since the start of the scheme to 1,166,702. One new species, Adelie penguin, was added to the list of species banded. Bird banding supported a large variety of research/management projects and was regulated by 22 Personal permits and 39 Institutional/group permits.

1. Introduction

Bird banding (ringing) is recognised world-wide as an important research tool for both amateur and professional ornithologists. In New Zealand it has been recognised officially since 1950, when the Ornithological Society of New Zealand started the first organised scheme. Since 1947 the Wildlife Branch of the Department of Internal Affairs ran its own scheme, specifically for game bird species. The New Zealand National Banding Scheme as it exists today was initiated in 1967, when the two then existing schemes (run by the Dominion Museum and the New Zealand Wildlife Service respectively) were joined together. Between 1967 and 1987 the scheme was run under the auspices of the Wildlife Service. In 1987 the New Zealand National Banding Scheme was taken over by the Department of Conservation and is now operated and maintained by their Science & Research Division (Cossee 1990).

The objective of the scheme is to accurately record information about life expectancy and movements of birds. Apart from its value in understanding bird biology, such knowledge is essential for the effective conservation of native species and for the management of game birds, as well as for the control of those species that are considered a nuisance.

This report summarises the bird banding activity in New Zealand during the 1994/95 banding season and gives details of some interesting recoveries. Appendix 1 lists known research projects which were serviced by the Banding Scheme during this year.

2. Methods

The totals given are for the period between 1 April 1994 and 31 March 1995. They may include some records for birds banded in previous years however, as schedules not received in time for inclusion in the 1993/94 report have been included here. Similarly, totals relating to the present report year, which were received after the cut-off date for this report, were omitted.

Previously banded birds which were re-banded during the year are not included in the totals, nor in Table 1. Details on re-banded birds can be found in Table 2.

The naming and order of species in this report is based on the Annotated Checklist of the Birds of New Zealand (Kinsky 1970 and subsequent amendments and additions). The Ornithological Society of New Zealand published an updated version of the Checklist of the Birds of New Zealand in 1990 (Turbott 1990). The order of species in this new version differs markedly from the earlier published checklists. For the sake of continuity as well as to avoid reprogramming of existing computer programmes it was decided to adhere to the previous edition.

The recently proposed changes to the taxonomy of the Albatrosses and Mollymawks will progressively be integrated in the annual Banding Reports, when birds identified as belonging to a certain species are banded. Birds previously banded without the present distinction will be listed as 'sp.'.

The species code numbers are those used under the Banding Scheme.

Numbers in open brackets are provisional totals and are lower than the actual number banded. This is because actual figures for birds banded during the early years of banding under the Department of Internal Affairs are not known. Figures in square brackets indicate birds banded as an unknown species of a particular genus. These latter are included in Table 1 as they contribute to the **total number of birds** banded. They are **not** included in the **total number of species** banded.

3. Results

During the 1994/95 banding year 18,490 birds of 100 species were banded and 87 previously banded birds were re-banded. Non-game species contributed 17,479 (just over 94.5%) and game species 1,011 (slightly over 5.4%) to the new birds banded. The overall number of birds banded was comparable with the previous year.

The total number of birds banded in New Zealand increased from 1,148,212 to 1,166,702.

Although Adelie penguins (*Pygoscelis adeliae*) have been banded by New Zealand banders in the past, the operators worked under permit, and with bands, from the U S Fish & Wildlife Service. Hence these bandings were not reported by the New Zealand National Banding Scheme. We now have our own bands and in future our Adelie penguin banding will be reported under the N Z scheme.

The numbers banded for each species are given in Table 1 (**re-banded birds have been omitted from this table**).

Table 2 summarises birds banded during the 1994/95 season by their ages and sexes. Also included in this table are the 87 birds that were re-banded during the year. They can be found under the heading 'RB'. These birds are included to illustrate the overall banding effort.

Species and numbers of individual birds banded under each permit are given in Table 3.

Bird banding supported a great number of research and management projects. These are listed in Appendix 1. Numbers in brackets after the project titles are the individual permit numbers.

TABLE 1. GENERAL BANDING TOTALS (REBANDS EXCLUDED).

SPECIES NUMBER AND NAME		TOTAL PRE-1994	TOTAL 1994/95	TOTAL FOR ALL YEARS
001	NORTH ISLAND BROWN KIWI	357	0	357
002	SOUTH ISLAND BROWN KIWI	4	0	4
003	STEWART ISLAND BROWN KIWI	21	0	21
004	LITTLE SPOTTED KIWI	259	0	259
012	YELLOW-EYED PENGUIN	5907	425	6332
023	ADELIE PENGUIN	0	1083	1083
026	NORTHERN BLUE PENGUIN	673	59	732
014	COOK STRAIT BLUE PENGUIN	2280	49	2329
016	WHITE-FLIPPED BLUE PENGUIN	13324	570	13894
015	SOUTHERN BLUE PENGUIN	1954	606	2560
027	CHATHAM ISLAND BLUE PENGUIN	35	0	35
017	ROCKHOPPER PENGUIN	2466	107	2573
019	FIORDLAND CRESTED PENGUIN	729	276	1005
020	SNARES CRESTED PENGUIN	2179	0	2179
021	ERECT-CRESTED PENGUIN	43	0	43
041	WANDERING ALBATROSS SP.	3814	170	3984
044	NORTHERN ROYAL ALBATROSS	3191	224	3415
043	SOUTHERN ROYAL ALBATROSS	33375	480	33855
045	BLACK-BROWED MOLLYMAWK	21	0	21
046	NEW ZEALAND BLACK-BROWED MOLLYMAWK	23237	687	23924
904	BLACK-BROWED MOLLYMAWK X-BRED	0	1	1
047	GREY-HEADED MOLLYMAWK	6644	198	6842
049	BULLER'S MOLLYMAWK SP.	2795	150	2945
907	NORTHERN BULLER'S MOLLYMAWK	0	89	89
050	WHITE-CAPPED (SHY) MOLLYMAWK SP.	593	0	593
052	SALVIN'S MOLLYMAWK	1296	0	1296
051	CHATHAM ISLAND MOLLYMAWK	1424	696	2120
054	LIGHT-MANTLED SOOTY ALBATROSS	437	0	437
109	NORTHERN GIANT PETREL	1239	0	1239
061	SOUTHERN GIANT PETREL	7	0	7
064	ANTARCTIC FULMAR	2	0	2
063	SNARES CAPE PIGEON	873	11	884
062	CAPE PIGEON	6800	0	6800
093	GREY-FACED PETREL	21978	1853	23831
094	WHITE-HEADED PETREL	31	0	31
095	WHITE-NAPED PETREL	516	0	516
098	MOTTLED PETREL	449	0	449
110	SOFT-PLUMAGED PETREL	20	0	20
100	KERMADEC PETREL	1056	0	1056
111	CHATHAM ISLAND TAIKO	51	0	51
101	PYCROFT'S PETREL	980	101	1081
102	GOULD'S PETREL	1	0	1
104	COOK'S PETREL	336	0	336
106	BLACK-WINGED PETREL	2818	42	2860
105	CHATHAM ISLAND PETREL	60	85	145

[] Numbers in square brackets indicate birds of an unknown species of a particular genus.

() Numbers in open brackets are provisional totals. More birds of these species have been banded, but early records are not available.

SPECIES NUMBER AND NAME		TOTAL PRE 1994	TOTAL 1993/94	TOTAL FOR ALL YEARS
065	BLUE PETREL	1	0	1
066	BROAD-BILLED PRION	1624	9	1633
069	ANTARCTIC PRION	20	0	20
071	AUCKLAND ISLAND PRION	24	0	24
072	NARROW-BILLED PRION	1	0	1
073	FAIRY PRION	43666	0	43666
075	FULMAR PRION	61	0	61
074	CHATHAM FULMAR PRION	2	0	2
089	GREY PETREL	8	0	8
090	BLACK PETREL	1007	6	1013
091	WESTLAND BLACK PETREL	4043	104	4147
092	WHITE-CHINNED PETREL	31	0	31
077	FLESH-FOOTED SHEARWATER	1808	0	1808
078	WEDGE-TAILED SHEARWATER	461	53	514
079	BULLER'S SHEARWATER	1049	0	1049
080	SOOTY SHEARWATER	7605	58	7663
115	CHRISTMAS ISLAND SHEARWATER	1	0	1
082	FLUTTERING SHEARWATER	1868	74	1942
083	HUTTON'S SHEARWATER	1134	114	1248
084	NORFOLK ISLAND LITTLE SHEARWATER	1	0	1
085	KERMADEC LITTLE SHEARWATER	354	0	354
086	NORTH ISLAND LITTLE (ALLIED) SHEARWATER	736	181	917
087	SUBANTARCTIC LITTLE SHEARWATER	5	0	5
—	PRION SPECIES	[4]	0	[4]
121	LEACH'S FORK-TAILED PETREL	1	0	1
123	GREY-BACKED STORM PETREL	788	0	788
124	WHITE-FACED STORM PETREL	6609	45	6654
125	KERMADEC STORM PETREL	1	0	1
126	BLACK-BELLIED STORM PETREL	6	0	6
127	WHITE-BELLIED STORM PETREL	25	0	25
131	NORTHERN DIVING PETREL	7207	110	7317
133	SUBANTARCTIC DIVING PETREL	19	0	19
132	SOUTHERN DIVING PETREL	107	6	113
134	SOUTH GEORGIAN DIVING PETREL	4	0	4
135	DIVING PETREL SPECIES	1	0	1
—	PETREL SPECIES	[1]	0	[1]
141	RED-TAILED TROPIC BIRD	119	0	119
142	WHITE-TAILED TROPIC BIRD	13	0	13
161	AUSTRALASIAN GANNET	19327	2754	22081
162	BROWN BOOBY	1	31	32
163	MASKED (BLUE-FACED) BOOBY	446	0	446
171	BLACK SHAG	559	37	596
172	PIED SHAG	168	0	168
173	LITTLE BLACK SHAG	955	0	955
174	LITTLE (WHITE-THROATED) SHAG	116	0	116
176	STEWART ISLAND SHAG	2	0	2
179	AUCKLAND ISLAND SHAG	154	0	154
180	CAMPBELL ISLAND SHAG	66	0	66

[] Numbers in square brackets indicate birds of an unknown species of a particular genus.

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SPECIES NUMBER AND NAME	TOTAL PRE 1994	TOTAL 1994/95	TOTAL FOR ALL YEARS	
182	SPOTTED SHAG	518	27	545
216	WHITE-FACED HERON	14	0	14
213	WHITE HERON	2	0	2
215	REEF HERON	80	7	87
220	CATTLE EGRET	1	0	1
218	BITTERN	7	0	7
233	ROYAL SPOONBILL	51	32	83
242	MUTE SWAN	4	0	4
243	BLACK SWAN	(59980)	0	(59980)
241	CANADA GOOSE	(54473)	0	(54473)
245	PARADISE SHELDUCK	(69125)	0	(69125)
252	MALLARD	(90109)	125	(90234)
259	HYBRID MALLARD (CROSS)	(1761)	1	(1762)
251	GREY DUCK	(34229)	0	(34229)
247	GREY TEAL	(1490)	0	(1490)
248	BROWN TEAL	(1797)	168	(1965)
249	AUCKLAND ISLAND TEAL	45	0	45
250	CAMPBELL ISLAND TEAL	3	0	3
253	NEW ZEALAND SHOVELER	(4494)	0	(4494)
254	BLUE DUCK	(304)	133	(437)
256	NEW ZEALAND SCAUP	(113)	0	(113)
—	DUCK (GREY OR MALLARD)	[(13)]	0	[(13)]
272	AUSTRALASIAN HARRIER	5308	169	5477
281	NEW ZEALAND FALCON	56	6	62
296	CHUKOR	2217	0	2217
299	RED-LEGGED PARTRIDGE	22178	860	23038
300	RED-LEGGED PARTRIDGE (HYBRID)	42	0	42
298	GREY PARTRIDGE	(14215)	0	(14215)
292	BROWN QUAIL	19	1	20
295	CALIFORNIA QUAIL	(12205)	0	(12205)
293	PHEASANT	(58793)	0	(58793)
331	BANDED RAIL	32	0	32
335	NORTH ISLAND WEKA	3671	64	3735
336	WESTERN WEKA	685	0	685
337	BUFF WEKA	31	0	31
338	STEWART ISLAND WEKA	826	0	826
340	MARSH CRAKE	5	0	5
341	SPOTLESS CRAKE	23	0	23
342	PUKEKO	2120	24	2144
343	NOTORNIS	358	15	373
—	WEKA SPECIES	[1]	0	[1]
401	SOUTH ISLAND PIED OYSTERCATCHER	2574	135	2709
402	VARIABLE OYSTERCATCHER	331	79	410
404	CHATHAM ISLAND OYSTERCATCHER	93	22	115
403	(BLACK OYSTERCATCHER)	101	0	101
411	SPUR-WINGED PLOVER	632	6	638
413	LEAST GOLDEN PLOVER (PACIFIC GOLDEN PLOVER)	5	0	5

[] Numbers in square brackets indicate birds of an unknown species of a particular genus.

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SPECIES NUMBER AND NAME	TOTAL PRE 1994	TOTAL 1994/95	TOTAL FOR ALL YEARS	
418	NEW ZEALAND DOTTEREL	662	77	739
415	BANDED DOTTEREL	4257	118	4375
422	BLACK-FRONTED DOTTEREL	123	5	128
419	NEW ZEALAND SHORE PLOVER	470	52	522
420	WRYBILL	4524	20	4544
445	EASTERN BAR-TAILED GODWIT	852	149	1001
449	WANDERING TATTLER	1	0	1
448	TEREK SANDPIPER	1	0	1
451	TURNSTONE	18	0	18
453	CHATHAM ISLAND SNIPE	150	0	150
454	SNARES ISLAND SNIPE	274	0	274
458	KNOT	4020	29	4049
461	CURLEW SANDPIPER	19	0	19
462	RED-NECKED STINT	3	0	3
481	PIED STILT	1173	0	1173
482	BLACK STILT	129	0	129
511	SOUTHERN GREAT SKUA	1749	0	1749
512	ANTARCTIC SKUA	2414	0	2414
514	ARCTIC SKUA	1	0	1
521	SOUTHERN BLACK-BACKED GULL	71969	610	72579
523	RED-BILLED GULL	91136	191	91327
524	BLACK-BILLED GULL	37518	331	37849
527	CASPIAN TERN	5605	59	5664
525	BLACK-FRONTED TERN	1437	25	1462
529	ANTARCTIC TERN	158	0	158
531	FAIRY TERN	22	2	24
532	WHITE-FRONTED TERN	23654	14	23668
533	SOOTY TERN	14654	0	14654
534	COMMON NODDY	4	0	4
535	WHITE-CAPPED NODDY	26	0	26
536	WHITE TERN	3	0	3
537	GREY TERNLET	190	0	190
551	NEW ZEALAND PIGEON	176	19	195
552	CHATHAM ISLAND PIGEON	73	31	104
553	ROCK PIGEON	60	0	60
554	MALAY SPOTTED DOVE	10	0	10
555	BARBARY DOVE	1	0	1
561	KAKAPO	84	0	84
562	NORTH ISLAND KAKA	88	21	109
563	SOUTH ISLAND KAKA	87	6	93
564	KEA	1600	18	1618
566	EASTERN ROSELLA	2	0	2
572	ANTIPODES ISLAND PARAKEET	69	0	69
567	KERMADEC PARAKEET	7	0	7
568	RED-CROWNED PARAKEET	768	0	768
569	CHATHAM ISLAND RED-CROWNED PARAKEET	1	0	1
570	REISCHECK'S PARAKEET	56	0	56
573	YELLOW-CROWNED PARAKEET	142	0	142

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SPECIES NUMBER AND NAME		TOTAL PRE 1994	TOTAL 1994/95	TOTAL FOR ALL YEARS
574	CHATHAM ISLAND YELLOW-CROWNED PARAKEET	9	0	9
583	SHINING CUCKOO	75	0	75
584	LONG-TAILED CUCKOO	4	0	4
601	MOREPORK	51	0	51
604	LITTLE OWL	16	0	16
621	NEW ZEALAND KINGFISHER	267	4	271
641	NORTH ISLAND RIFLEMAN	150	0	150
642	SOUTH ISLAND RIFLEMAN	1128	0	1128
646	ROCK WREN	9	0	9
651	SKYLARK	42	2	44
662	WELCOME SWALLOW	387	0	387
741	NEW ZEALAND PIPIT	50	0	50
731	HEDGESPARROW	2449	14	2463
701	NORTH ISLAND FERNBIRD	34	0	34
702	SOUTH ISLAND FERNBIRD	258	18	276
703	STEWART ISLAND FERNBIRD	27	0	27
706	SNARES FERNBIRD	152	0	152
711	BROWN CREEPER	297	0	297
712	WHITEHEAD	363	0	363
713	YELLOWHEAD	148	0	148
714	GREY WARBLER	1131	7	1138
715	CHATHAM ISLAND WARBLER	74	0	74
681	NORTH ISLAND FANTAIL	688	4	692
682	SOUTH ISLAND FANTAIL	890	11	901
684	PIED TIT	175	0	175
685	YELLOW-BREASTED TIT	420	7	427
686	CHATHAM ISLAND TIT	37	0	37
687	BLACK TIT	161	0	161
689	NORTH ISLAND ROBIN	146	90	236
690	SOUTH ISLAND ROBIN	2694	6	2700
691	STEWART ISLAND ROBIN	10	0	10
692	BLACK ROBIN	391	75	466
721	SONG THRUSH	3351	14	3365
722	BLACKBIRD	7655	12	7667
761	SILVEREYE	71616	2535	74151
751	STITCHBIRD	401	42	443
753	BELLBIRD	6082	28	6110
755	TUI	983	2	985
756	CHATHAM ISLAND TUI	1	0	1
775	YELLOWHAMMER	1120	8	1128
776	CIRL BUNTING	27	0	27
774	CHAFFINCH	3205	8	3213
771	GREENFINCH	8434	3	8437
772	GOLDFINCH	3510	12	3522
773	REDPOLL	8128	16	8144
781	HOUSE SPARROW	34836	129	34965

[] Numbers in square brackets indicate birds of an unknown species of a particular genus.

() Numbers in open brackets are provisional totals. More birds of these species have been banded, but early records are not available.

SPECIES NUMBER AND NAME		TOTAL PRE 1994	TOTAL 1994/95	TOTAL FOR ALL YEARS
791	STARLING	18309	7	18316
792	INDIAN MYNA	1401	0	1401
821	NORTH ISLAND SADDLEBACK	2454	178	2632
822	SOUTH ISLAND SADDLEBACK	315	2	317
824	NORTH ISLAND KOKAKO	190	61	251
811	BLACK-BACKED MAGPIE	41	0	41
812	WHITE-BACKED MAGPIE	263	0	263
813	HYBRID MAGPIE	25	0	25
—	MAGPIE SPECIES	4	0	4
802	ROOK	1070	0	1070
TOTAL		1148212	18490	1166702

- [] Numbers in square brackets indicate birds of an unknown species of a particular genus.
 () Numbers in open brackets are provisional totals. More birds of these species have been banded, but early records are not available.

TABLE 2. BANDING TOTALS BY AGE AND SEX.

SPECIES NUMBER AND NAME	PU	JM	JF	JU	AM	AF	AU	UM	UF	UU	RB	TOTAL
012 YELLOW-EYED PENGUIN	381	0	0	9	0	0	35	0	0	0	9	434
023 ADELIE PENGUIN	1000	0	0	0	0	0	83	0	0	0	0	1083
026 NORTHERN BLUE PENGUIN	0	0	0	0	0	0	59	0	0	0	0	59
014 COOK STRAIT BLUE PENGUIN	26	1	0	0	11	11	0	0	0	0	0	49
016 WHITE-FLIPPED BLUE PENGUIN	520	0	0	0	0	0	50	0	0	0	0	570
015 SOUTHERN BLUE PENGUIN	356	0	0	0	97	69	84	0	0	0	1	607
017 ROCKHOPPER PENGUIN	25	0	0	0	39	43	0	0	0	0	0	107
019 FIORDLAND CRESTED PENGUIN	45	0	0	3	117	106	5	0	0	0	2	278
041 WANDERING ALBATROSS	32	0	0	0	0	2	136	0	0	0	0	170
044 NORTHERN ROYAL ALBATROSS	223	0	0	0	0	0	1	0	0	0	1	225
043 SOUTHERN ROYAL ALBATROSS	480	0	0	0	0	0	0	0	0	0	2	482
046 NEW ZEALAND BLACK-BROWED MOLLYMAWK	663	0	0	0	0	0	24	0	0	0	36	723
904 BLACK-BROWED MOLLYMAWK X-BRED	1	0	0	0	0	0	0	0	0	0	0	1
047 GREY-HEADED MOLLYMAWK	150	0	0	1	0	0	47	0	0	0	7	205
049 BULLER'S MOLLYMAWK	150	0	0	0	0	0	0	0	0	0	0	150
907 NORTHERN BULLER'S MOLLYMAWK	0	0	0	0	0	0	89	0	0	0	0	89
051 CHATHAM ISLAND MOLLYMAWK	696	0	0	0	0	0	0	0	0	0	0	696
063 SNARES CAPE PIGEON	0	0	0	0	5	6	0	0	0	0	0	11
093 GREY-FACED PETREL	878	0	0	0	0	0	975	0	0	0	0	1853
101 PYCROFT'S PETREL	27	0	0	0	0	0	74	0	0	0	0	101
106 BLACK-WINGED PETREL	31	0	0	0	0	0	11	0	0	0	0	42
105 CHATHAM ISLAND PETREL	10	0	0	0	2	7	66	0	0	0	0	85
066 BROAD-BILLED PRION	1	0	0	0	0	0	8	0	0	0	0	9
090 BLACK PETREL	5	0	0	0	0	0	1	0	0	0	0	6
091 WESTLAND BLACK PETREL	4	0	0	94	0	1	5	0	0	0	0	104
078 WEDGE-TAILED SHEARWATER	53	0	0	0	0	0	0	0	0	0	0	53
080 SOOTY SHEARWATER	0	0	0	0	0	0	58	0	0	0	0	58
082 FLUTTERING SHEARWATER	0	0	0	0	0	0	74	0	0	0	0	74
083 HUTTON'S SHEARWATER	22	0	0	0	0	0	92	0	0	0	0	114
086 NORTH ISLAND LITTLE (ALLIED) SHEARWATER	13	0	0	0	16	14	138	0	0	0	0	181
124 WHITE-FACED STORM PETREL	0	0	0	0	0	0	45	0	0	0	0	45
131 NORTHERN DIVING PETREL	1	0	0	0	0	0	109	0	0	0	0	110
132 SOUTHERN DIVING PETREL	5	0	0	0	0	0	1	0	0	0	0	6
161 AUSTRALASIAN GANNET	66	0	0	2425	1	1	261	0	0	0	0	2754
162 BROWN BOOBY	31	0	0	0	0	0	0	0	0	0	0	31
171 BLACK SHAG	37	0	0	0	0	0	0	0	0	0	0	37
182 SPOTTED SHAG	27	0	0	0	0	0	0	0	0	0	0	27
215 REEF HERON	7	0	0	0	0	0	0	0	0	0	0	7
233 ROYAL SPOONBILL	32	0	0	0	0	0	0	0	0	0	0	32
252 MALLARD	0	18	26	0	36	45	0	0	0	0	0	125
259 HYBRID MALLARD (CROSS)	0	0	0	0	0	1	0	0	0	0	0	1
248 BROWN TEAL	23	6	6	0	78	55	0	0	0	0	0	168
254 BLUE DUCK	0	49	36	0	27	21	0	0	0	0	12	145

Abbreviations used in the column headings:

PU = Pullus of unknown sex

AM = Adult male

UF = Female of unknown age

JM = Juvenile male

AF = Adult female

UU = Unknown age and sex

JF = Juvenile female

AU = Adult of unknown sex

RB = Birds re-banded

JU = Juvenile of unknown sex

UM = Male of unknown age

SPECIES NUMBER AND NAME	PU	JM	JF	JU	AM	AF	AU	UM	UF	UU	RB	TOTAL
272 AUSTRALASIAN HARRIER	0	60	24	16	26	20	23	0	0	0	0	169
281 NEW ZEALAND FALCON	0	4	2	0	0	0	0	0	0	0	0	6
299 RED-LEGGED PARTRIDGE	0	238	303	117	101	101	0	0	0	0	0	860
292 BROWN QUAIL	0	0	0	0	0	0	0	0	0	1	0	1
335 NORTH ISLAND WEKA	0	28	32	0	1	3	0	0	0	0	1	65
342 PUKEKO	0	0	0	1	14	8	1	0	0	0	0	24
343 NOTORNIS	0	2	1	11	1	0	0	0	0	0	0	15
401 SOUTH ISLAND PIED OYSTERCATCHER	20	0	0	5	11	19	76	0	0	4	1	136
402 VARIABLE OYSTERCATCHER	43	0	0	2	14	7	13	0	0	0	5	84
404 CHATHAM ISLAND OYSTERCATCHER	0	0	0	22	0	0	0	0	0	0	0	22
411 SPUR-WINGED PLOVER	0	0	0	6	0	0	0	0	0	0	0	6
418 NEW ZEALAND DOTTEREL	46	0	0	10	6	3	12	0	0	0	1	78
415 BANDED DOTTEREL	47	0	0	0	22	42	7	0	0	0	0	118
422 BLACK-FRONTED DOTTEREL	1	0	0	0	0	0	4	0	0	0	0	5
419 NEW ZEALAND SHORE PLOVER	2	3	2	42	1	2	0	0	0	0	2	54
420 WRYBILL	2	0	0	2	0	2	14	0	0	0	1	21
445 EASTERN BAR-TAILED GODWIT	0	0	0	1	17	18	112	0	0	1	2	151
458 KNOT	0	0	0	0	0	0	29	0	0	0	1	30
521 SOUTHERN BLACK-BACKED GULL	609	0	0	1	0	0	0	0	0	0	0	610
523 RED-BILLED GULL	143	0	0	0	18	26	4	0	0	0	3	194
524 BLACK-BILLED GULL	331	0	0	0	0	0	0	0	0	0	0	331
527 CASPIAN TERN	59	0	0	0	0	0	0	0	0	0	0	59
525 BLACK-FRONTED TERN	25	0	0	0	0	0	0	0	0	0	0	25
531 FAIRY TERN	2	0	0	0	0	0	0	0	0	0	0	2
532 WHITE-FRONTED TERN	14	0	0	0	0	0	0	0	0	0	0	14
551 NEW ZEALAND PIGEON	0	0	0	0	5	3	11	0	0	0	0	19
552 CHATHAM ISLAND PIGEON	28	0	0	0	0	0	3	0	0	0	0	31
562 NORTH ISLAND KAKA	0	0	1	0	18	2	0	0	0	0	0	21
563 SOUTH ISLAND KAKA	0	0	0	0	5	1	0	0	0	0	0	6
564 KEA	0	5	3	3	4	1	2	0	0	0	0	18
621 NEW ZEALAND KINGFISHER	0	0	0	4	0	0	0	0	0	0	0	4
651 SKYLARK	2	0	0	0	0	0	0	0	0	0	0	2
731 HEDGESPARROW	0	0	0	0	0	0	12	0	0	2	0	14
702 SOUTH ISLAND FERNBIRD	18	0	0	0	0	0	0	0	0	0	0	18
714 GREY WARBLER	0	0	0	1	0	0	6	0	0	0	0	7
681 NORTH ISLAND FANTAIL	0	0	0	3	0	0	0	0	0	1	0	4
682 SOUTH ISLAND FANTAIL	0	0	0	2	0	0	9	0	0	0	0	11
685 YELLOW-BREASTED TIT	0	0	0	2	3	2	0	0	0	0	0	7
689 NORTH ISLAND ROBIN	42	0	0	0	9	4	35	0	0	0	0	90
690 SOUTH ISLAND ROBIN	0	0	0	1	2	3	0	0	0	0	0	6
692 BLACK ROBIN	25	0	0	49	0	0	1	0	0	0	0	75
721 SONG THRUSH	0	0	0	5	0	0	9	0	0	0	0	14
722 BLACKBIRD	0	2	1	2	4	3	0	0	0	0	0	12
761 SILVEREYE	0	0	0	39	0	0	2496	0	0	0	0	2535
751 STITCHBIRD	0	0	0	0	22	20	0	0	0	0	0	42
753 BELLBIRD	0	0	1	1	18	7	1	0	0	0	0	28
755 TUI	0	0	0	0	0	0	2	0	0	0	0	2

Abbreviations used in the column headings:

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AM = Adult male

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JM = Juvenile male

AF = Adult female

UU = Unknown age and sex

JF = Juvenile female

AU = Adult of unknown sex

RB = Birds re-banded

JU = Juvenile of unknown sex

UM = Male of unknown age

SPECIES NUMBER AND NAME	PU	JM	JF	JU	AM	AF	AU	UM	UF	UU	RB	TOTAL
775 YELLOWHAMMER	0	0	0	0	4	4	0	0	0	0	0	8
774 CHAFFINCH	0	0	0	1	3	2	1	0	1	0	0	8
771 GREENFINCH	0	0	0	0	2	0	1	0	0	0	0	3
772 GOLDFINCH	0	0	0	2	3	5	2	0	0	0	0	12
773 REDPOLL	0	0	0	0	7	9	0	0	0	0	0	16
781 HOUSE SPARROW	0	12	30	8	50	23	1	1	0	4	0	129
791 STARLING	0	0	0	0	0	1	6	0	0	0	0	7
821 NORTH ISLAND SADDLEBACK	175	0	0	0	1	0	2	0	0	0	0	178
822 SOUTH ISLAND SADDLEBACK	0	0	0	2	0	0	0	0	0	0	0	2
824 NORTH ISLAND KOKAKO	54	0	0	0	2	2	3	0	0	0	0	61
TOTAL	7709	428	468	2893	823	725	5429	1	1	13	87	18577

Abbreviations used in the column headings:

PU = Pullus of unknown sex

AM = Adult male

UF = Female of unknown age

JM = Juvenile male

AF = Adult female

UU = Unknown age and sex

JF = Juvenile female

AU = Adult of unknown sex

RB = Birds re-banded

JU = Juvenile of unknown sex

UM = Male of unknown age

TABLE 3. SUMMARY PER PERMIT (REBANDS INCLUDED).

		BIRDS BANDED			BIRDS BANDED
PERMIT 0002	MILLS DR J A		PERMIT 0173	WELLINGTON FISH & GAME COUNCIL	
	RED-BILLED GULL	194		MALLARD	125
	**Subtotal **	194		HYBRID MALLARD (CROSS)	1
				**Subtotal **	126
PERMIT 0005	ROBERTSON C J R		PERMIT 0174	NELSON/MARLBOROUGH FISH & GAME COUNCIL	
	NORTHERN ROYAL ALBATROSS	225		RED-LEGGED PARTRIDGE	319
	NORTHERN BULLER'S MOLLYMAWK	89		**Subtotal **	319
	CHATHAM ISLAND MOLLYMAWK	696			
	**Subtotal **	1010			
PERMIT 0032	DAVIS V T		PERMIT 0179	S. CANTERBURY FISH & GAME COUNCIL	
	AUSTRALASIAN GANNET	2425		RED-LEGGED PARTRIDGE	541
	**Subtotal **	2425		**Subtotal **	541
PERMIT 0042	CHALLIES C N		PERMIT 0215	TORR O C	
	WHITE-FLIPPED BLUE PENGUIN	570		SONG THRUSH	1
	**Subtotal **	570		HOUSE SPARROW	15
				**Subtotal **	16
PERMIT 0044	COWIE J A		PERMIT 0243	SIM D M	
	BANDED DOTTEREL	1		SPUR-WINGED PLOVER	6
	SOUTHERN BLACK-BACKED GULL	10		SILVEREYE	223
	BLACK-BILLED GULL	100		**Subtotal **	229
	**Subtotal **	111			
PERMIT 0076	BELL BRIAN D		PERMIT 0244	POWLESLAND R G	
	SOUTHERN BLACK-BACKED GULL	1		BLACK SHAG	37
	HOUSE SPARROW	50		CHATHAM ISLAND PIGEON	31
	**Subtotal **	51		**Subtotal **	68
PERMIT 0093	SAGAR P M		PERMIT 0246	PIERCE R J	
	SNARES CAPE PIGEON	11		FAIRY TERN	2
	SOUTH ISLAND PIED OYSTERCATCHER	33		**Subtotal **	2
	**Subtotal **	44			
PERMIT 0104	LANDCARE RESEARCH NZ LTD		PERMIT 0257	ONLEY D J	
	ADELIE PENGUIN	1083		HEDGESPARROW	7
	SOUTH ISLAND KAKA	6		GREY WARBLER	7
	**Subtotal **	1089		SOUTH ISLAND FANTAIL	5
				YELLOW-BREASTED TIT	3
PERMIT 0108	CAMPBELL ISLAND PARTY			SONG THRUSH	2
	WANDERING ALBATROSS	4		BLACKBIRD	4
	SOUTHERN ROYAL ALBATROSS	482		SILVEREYE	1104
	NEW ZEALAND BLACK-BROWED MOLLYMAWK	723		BELLBIRD	8
	BLACK-BROWED MOLLYMAWK CROSS	1		TUI	1
	GREY-HEADED MOLLYMAWK	205		YELLOWHAMMER	8
	**Subtotal **	1415		CHAFFINCH	2
				GOLDFINCH	5
				REDPOLL	14
				HOUSE SPARROW	51
				STARLING	4
				**Subtotal **	1225

		BIRDS BANDED			BIRDS BANDED
PERMIT 0259	MASSEY UNIVERSITY		PERMIT 0294	CANTERBURY PASSERINE GROUP	
	NORTH ISLAND ROBIN	42		HEDGESPARROW	4
	NORTH ISLAND SADDLEBACK	73		SOUTH ISLAND FANTAIL	5
	**Subtotal **	115		SONG THRUSH	6
PERMIT 0266	DANN P			BLACKBIRD	3
	FIORDLAND CRESTED PENGUIN	3		SILVEREYE	449
	**Subtotal **	3		BELLBIRD	8
PERMIT 0275	BEAUCHAMP A J			CHAFFINCH	2
	NORTH ISLAND WEKA	40		GREENFINCH	2
	**Subtotal **	40		GOLDFINCH	5
PERMIT 0278	N Z WADER STUDY GROUP			REDPOLL	2
	SOUTH ISLAND PIED OYSTERCATCHER	84		HOUSE SPARROW	6
	BANDED DOTTEREL	7		STARLING	3
	WRYBILL	17		**Subtotal **	495
	EASTERN BAR-TAILED GODWIT	151	PERMIT 0297	AUCKLAND UNIVERSITY	
	KNOT	30		NORTHERN BLUE PENGUIN	59
	**Subtotal **	289		NEW ZEALAND PIGEON	19
PERMIT 0282	DUCKS UNLIMITED (NZ)			NORTH ISLAND SADDLEBACK	105
	BROWN TEAL	1		**Subtotal **	183
	**Subtotal **	1	PERMIT 0301	DARBY J T	
PERMIT 0284	OTAGO UNIVERSITY			YELLOW-EYED PENGUIN	434
	PUKEKO	24		**Subtotal **	434
	**Subtotal **	24	PERMIT 0307	COSSEE R O	
PERMIT 0285	RAPTOR ASSOCIATION OF N Z			COOK STRAIT BLUE PENGUIN	49
	AUSTRALASIAN HARRIER	143		FIORDLAND CRESTED PENGUIN	2
	NEW ZEALAND FALCON	6		SPOTTED SHAG	27
	**Subtotal **	149		REEF HERON	3
PERMIT 0291	NORTHLAND/FAR NORTH REGION OSNZ			VARIABLE OYSTERCATCHER	17
	SOUTHERN BLACK-BACKED GULL	290		SOUTHERN BLACK-BACKED GULL	309
	**Subtotal **	290		WHITE-FRONTED TERN	14
PERMIT 0292	ROWE L K			KEA	3
	SKYLARK	2		BLACKBIRD	1
	HEDGESPARROW	1		SILVEREYE	433
	SOUTH ISLAND FANTAIL	1		TUI	1
	YELLOW-BREASTED TIT	4		SOUTH ISLAND SADDLEBACK	2
	SOUTH ISLAND ROBIN	6		**Subtotal **	861
	SONG THRUSH	4	PERMIT 0317	BANDED DOTTEREL STUDY GROUP	
	SILVEREYE	10		BLACK-FRONTED DOTTEREL	5
	BELLBIRD	12		**Subtotal **	5
	CHAFFINCH	2	PERMIT 0323	DOWDING J	
	GREENFINCH	1		(N Z DOTTEREL STUDY GROUP)	
	HOUSE SPARROW	2		NEW ZEALAND DOTTEREL	77
	**Subtotal **	45		**Subtotal **	77

		BIRDS BANDED			BIRDS BANDED
PERMIT 0325	OSNZ AUCKLAND SEABIRD GROUP		PERMIT 0350	GOODWIN A	
	GREY-FACED PETREL	1070		BLACK-BILLED GULL	231
	BLACK PETREL	6		**Subtotal **	231
	FLUTTERING SHEARWATER	74	PERMIT 0358	D O C MOLLYMAWK PROJECT	
	NORTH ISLAND LITTLE (ALLIED) SHEARWATER	100		BULLER'S MOLLYMAWK	150
	WHITE-FACED STORM PETREL	45		**Subtotal **	150
	NORTHERN DIVING PETREL	110	PERMIT 0363	STAPLES G C	
	**Subtotal **	1405		NORTH ISLAND WEKA	25
PERMIT 0337	ROYAL SPOONBILL PROJECT OSNZ			**Subtotal **	25
	ROYAL SPOONBILL	20	PERMIT 0366	O S N Z HAWKES BAY	
	**Subtotal **	20		SOUTH ISLAND PIED OYSTERCATCHER	3
PERMIT 0338	WELLINGTON CONSERVANCY D O C			**Subtotal **	3
	SOOTY SHEARWATER	50	PERMIT 0367	SCHWEIGMAN P	
	NORTH ISLAND ROBIN	48		ROYAL SPOONBILL	12
	**Subtotal **	98		VARIABLE OYSTERCATCHER	22
PERMIT 0339	TAYLOR T J			**Subtotal **	34
	AUSTRALASIAN HARRIER	20	PERMIT 0368	DOWDING J E	
	**Subtotal **	20		VARIABLE OYSTERCATCHER	30
PERMIT 0340	NORTHLAND PASSERINE GROUP			**Subtotal **	30
	BROWN QUAIL	1	PERMIT 0370	FREEMAN AMANDA	
	NEW ZEALAND KINGFISHER	4		WESTLAND BLACK PETREL	104
	HEDGESPARROW	2		**Subtotal **	104
	NORTH ISLAND FANTAIL	4	PERMIT 0373	BAY OF PLENTY CONSERVANCY D O C	
	SONG THRUSH	1		VARIABLE OYSTERCATCHER	15
	BLACKBIRD	4		NEW ZEALAND DOTTEREL	1
	SILVEREYE	316		CASPIAN TERN	44
	CHAFFINCH	2		STITCHBIRD	42
	GOLDFINCH	2		**Subtotal **	102
	HOUSE SPARROW	5	PERMIT 0374	MORGAN G W	
	**Subtotal **	341		CASPIAN TERN	15
PERMIT 0341	OSNZ NELSON/MARLBOROUGH			**Subtotal **	15
	AUSTRALASIAN GANNET	328	PERMIT 0376	TAKAHE RECOVERY GROUP D O C	
	AUSTRALASIAN HARRIER	6		NOTORNIS	15
	**Subtotal **	334		**Subtotal **	15
PERMIT 0346	D O C AUCKLAND ISLAND PROJECTS		PERMIT 0378	SOUTHLAND CONSERVANCY D O C	
	WANDERING ALBATROSS	166		SOUTH ISLAND FERNBIRD	18
	**Subtotal **	166		**Subtotal **	18
PERMIT 0349	NORTHLAND SEABIRD GROUP		PERMIT 0381	AUSTRALIAN BANDING SCHEME	
	PYCROFT'S PETREL	101		ROCKHOPPER PENGUIN	107
	NORTH ISLAND LITTLE (ALLIED) SHEARWATER	81		**Subtotal **	107
	**Subtotal **	182			

		BIRDS BANDED			BIRDS BANDED
PERMIT 0382	NEW CALEDONIAN PROJECTS		PERMIT 7125	CANTERBURY CONSERVANCY, D O C	
	BLACK-WINGED PETREL	31		BLACK-WINGED PETREL	11
	WEDGE-TAILED SHEARWATER	53		CHATHAM ISLAND PETREL	85
	BROWN BOOBY	31		BROAD-BILLED PRION	9
	**Subtotal **	115		SOUTHERN DIVING PETREL	6
PERMIT 0383	OATES KERRY			SOUTH ISLAND PIED OYSTERCATCHER	16
	BLUE DUCK	13		CHATHAM ISLAND OYSTERCATCHER	22
	**Subtotal **	13		BANDED DOTTEREL	110
PERMIT 1125	NORTHERN CONSERVANCIES D O C			NEW ZEALAND SHORE PLOVER	49
	REEF HERON	4		WRYBILL	4
	**Subtotal **	4		BLACK-FRONTED TERN	25
PERMIT 4125	WANGANUI CONSERVANCY D O C			KEA	15
	AUSTRALASIAN GANNET	1		BLACK ROBIN	75
	BLUE DUCK	24		**Subtotal **	427
	NEW ZEALAND SHORE PLOVER	5	PERMIT 8125	SOUTHERN CONSERVANCIES, D O C	
	**Subtotal **	30		SOUTHERN BLUE PENGUIN	607
PERMIT 5125	NELSON/MARLBOROUGH CONSERVANCY, D O C			**Subtotal **	607
	SOOTY SHEARWATER	8	PERMIT 9125	SCIENCE & RESEARCH, D O C	
	HUTTON'S SHEARWATER	114		GREY-FACED PETREL	783
	**Subtotal **	122		BROWN TEAL	167
PERMIT 6125	WEST COAST CONSERVANCY D O C			BLUE DUCK	108
	FIORDLAND CRESTED PENGUIN	273		NORTH ISLAND KAKA	21
	**Subtotal **	273		NORTH ISLAND KOKAKO	61
				**Subtotal **	1140
			*** Total ***		18577

4. Recoveries

Large numbers of recoveries were reported by the general public. The growing awareness of the importance to report sightings of individually colour banded birds has meant a steady increase in the number of these reports. Nearly half of the recoveries related to colour banded birds.

The handling of 'public' recoveries has precedence over those reported by the banders. Where possible, they are dealt with on the day of receipt. All finders are informed of the relevant banding details and receive some additional information on the New Zealand National Banding Scheme. Maximum required turnover time for public recoveries is ten days, but usually staff managed to process recoveries within a week of receipt.

The Banding Scheme plays a major role as an interface between the Department of Conservation, the public and many national and international organisations and institutions. A quick and efficient response enhances the chance of members of the public sending in bands. As mentioned in previous reports, the New Zealand National Banding Scheme continues to have one of the fastest response times for public recoveries in the world, as well as the highest recovery rate!

Some notable recoveries

Several **Wandering Albatrosses** (*Diomedea exulans*) banded under the Australian Bird & Bat Banding Scheme were recovered on New Zealand sub-Antarctic islands.

140-25115 was banded as a bird of unknown age and sex at sea off Bellamby, NSW (34° 20' S, 151° 0' E) on 22/8/64. It was recovered incubating an egg on 26/1/94 on Adams Island in the Auckland Islands, 29 years and 5 months after banding.

140-25801 was banded at sea off Malabar, NSW (30° 58' S, 151° 20' E) on 25/6/66 as a bird of unknown age and sex. It was found incubating an egg on Adams Island on 7/2/94, 27 years and 7 months after banding.

140-26315, also banded off Malabar on 18/10/69, was recovered alive on Antipodes Island on 2/3/94.

Two foreign banded **Grey-headed Mollymawk** (*Diomedea chrysostoma*) were recovered.

507-9981 (BTO band) was banded by British Antarctic Survey on 24/11/76 on Bird Island, South Georgia (54° 0' S, 38° 2' W) as a bird of unknown sex and at least three years of age. It was recovered freshly dead at Oakura near New Plymouth on 24/9/95.

120-42571 (Australian band) was banded as a bird of unknown age and sex on 21/1/76 on Macquarie Island. It was found incubating an egg on Campbell Island on 17/10/92, when a NZ band (M-49428) was added.

Eight **Grey-faced Petrel** (*Pterodroma macroptera gouldi*) banded as chicks on Whale Island during December 1969 were recovered alive and well at their place of banding on 31/4/95, over 25 years after banding.

Two **Spotted Shags** (*Strictocarbo punctatus punctatus*) banded as nestlings on Somes Island, Wellington Harbour were recovered dead on the beach of Petone.

O-20834 was banded on 27/7/79 and found dead on 6/8/95, just over 16 years of age.

M-32723, banded on 21/9/75 was found dead on 17/6/95, 19 years, months after banding.

Variable Oystercatcher (*Haematopus unicolor*) **K-4760**, banded as a juvenile at Waipu on 15/5/71, was subsequently seen in the same area, identified by its colour combination. It was recaptured on Waipu Spit on 23/3/95 and was rebanded with **K-5298**. At that stage the bird was nearly 24 years old.

Knot (*Calidris canutus*) **C-31161** was banded at the Kaipara Harbour as an adult of unknown sex on 28/2/87. It was captured, presumably for food, at Miao-Gang, Yangtze River estuary, Shanghai, China (30° 52' N, 121° 52' E) in April 1994.

S-39714, a **Southern Black-backed Gull** (*Larus dominicanus*) was banded as a pullus on Somes Island, Wellington Harbour on 1/1/68. It was found, freshly dead, at Maoribank, Upper Hutt on 5/7/95, 27.5 years after banding.

Leg flags

The international effort in leg-flagging migratory waders along the East Asian-Australasian Flyway is becoming more and more widespread and keeps producing interesting results. So far nearly 25,000 waders have been flagged along the flyway. The practice has greatly increased the volume of data on stop-over sites, and migration routes in general.

Results of the flyway research are published in the bulletins of the Australasian Wader Study Group (The Stilt) and the New Zealand Wader Study Group. A brief outline of reports received during the year is given here.

Knots (*Calidris canutus canutus*), New Zealand (white) flagged on the Firth of Thames and the Manukau Harbour, have been sighted in Northland, Farewell Spit and at Altona Beach, Victoria, Australia.

Knots from Victoria (orange flagged) were reported from the Manukau Harbour, Firth of Thames, and Farewell Spit.

Knots from Queensland (green flagged) were seen in the Manukau and Kaipara Harbours, Firth of Thames, Northland, Manawatu and Farewell Spit.

A **Knot** from Western Australia (yellow flagged) was reported from Miranda, Firth of Thames.

Bar-tailed Godwits (*Limosa lapponica baueri*) white flagged on the Kaipara Harbour and Firth of Thames, although moving around the general area they were marked, do not normally seem to move far from there, so four sightings from Farewell Spit are of interest. Australian marked birds were seen on the Manukau and Firth of Thames as well as in the Christchurch area.

5. Acknowledgements

I am indebted to Mrs G D Tofield for her valued contribution to the administration of the New Zealand National Banding Scheme, to M J Wakelin for technical and field support, and to C J R Robertson for valuable advice during the year.

6. References

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Kinsky, F C 1970. Annotated checklist of the birds of New Zealand. Ornithological Society of New Zealand and A H & A W Reed, Wellington.

Turbott, E G 1990. Checklist of the birds of New Zealand. Ornithological Society of New Zealand and Random Century, Auckland.

Appendix 1

RESEARCH SUPPORTED BY BIRD BANDING DURING 1994/95

(Numbers in brackets indicate permit numbers)

Lifetime reproduction and the role of inheritance in the breeding of Red-billed Gulls at Kaikoura. (0002)

General ecological study of Albatrosses and Mollymawks, population dynamics, life span and dispersal patterns. (0005)

Life expectancy, breeding success, dispersal and census of the Australasian Gannet on White Island. (0032)

Breeding biology and movements of Westland Black Petrel. (0036, 0370)

Distribution, life expectancy and migration of native and introduced Passerines. (0076, 0215, 0243, 0257, 0259, 0292, 0294, 0297, 0307, 0340, 0378, 9125)

A long-term study of population dynamics, behaviour and dispersal of White-flipped Penguins. (0042)

Ecology of Adelie Penguins (0104)

Ecology, dispersal and habitat requirements of White-fronted Terns and Black-billed Gulls. (0044)

Distribution, movements and longevity of Caspian Terns. (0374)

Distribution and mortality of Mallard Duck. (0173)

Population dynamics, longevity, age of first breeding, migration dispersal and movements of Procelariiformes. (0093, 0325, 0338, 0346, 0349, 0358, 0382, 5125, 7125)

Mate & nest site retention, annual mortality and breeding success of the South Island Pied Oystercatcher. (0093)

Ecology and movements of South Island Kaka. (0104)

Southern Black-backed Gull dispersal and population dynamics. (0076, 0291, 0307)

Population dynamics of the seabirds of Campbell Island. (0108)

Establishment of populations of game farm bred Red-legged Partridge, Chukor and Pheasants in the wild. (0174, 0179)

Population dynamics and dispersal of Black Shag in the lower North Island. (0244)

Breeding biology and reproduction of the Chatham Island Pigeon. (0244)

Breeding biology of Brown Teal, and establishment of new populations in the wild. (0282, 9125)

Population dynamics and distribution of Fairy Terns in Northland. (0246)

Population dynamics of North Island Weka in the wild and those of aviary bred stock released into the wild. (0275, 0363)

Population dynamics of Little Blue Penguins. (0307, 8125)

Migration patterns in waders. (0278)

Productivity of Sooty Shearwaters. (0284)

Biology and distribution of New Zealand Raptors. (0285, 0339, 0341)

Ecology and dispersal of Fiordland Crested Penguins from Open Bay Island and the West Coast. (6125)

Population biology and vocalisation of North Island Saddleback on Tiritiri Matangi Island. (0297)

Behaviour and population dynamics of Kea. (7125)

Population dynamics and ecology of the Yellow-eyed Penguin. (0301)

Productivity of seabirds in and around Wellington Harbour. (0307)

Dispersal of Black-fronted Dotterel outside the breeding season. (0317)

Breeding biology, predation, habitat requirements and movements of New Zealand Dotterel. (0323)

Population dynamics of Grey-faced Petrel (0325, 9125)

Dispersal of Royal Spoonbills. (0337, 0367)

Population structure and dynamics of the Wandering Albatross on the Auckland Islands. (0346)

Population dynamics and dispersal of Variable Oystercatcher. (0367, 0368, 0373)

Population dynamics of Rockhopper penguins. (0381)

Breeding biology, productivity and predation of Kokako. (9125)

Long term monitoring of New Zealand Shore Plover and Chatham Island Oystercatcher in the Chatham Islands. (7125)

Dispersal of Blue Duck. (0383, 4125, 9125)

Chick production estimates of Grey-faced Petrel on Whale Island. (9125)

Ecology, productivity and distribution of Kiwis. (9125)

Distribution and ecology of the North Island Kaka. (9125)

Release of captive reared Takahe into the wild. (0376)

Ecology of South Island braided river birds. (7125)

NOTE: Although some permit numbers in the above list do not appear in Table 3, these permits were active, but banding data arrived too late to be included in this report.