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## REPORT ON BIRD BANDING <br> IN NEW ZEALAND <br> 1992-1993

by

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# REPORT ON BIRD BANDING IN NEW ZEALAND <br> 1992-1993 

by<br>Roderick O. Cossee<br>Science \& Research Division, Department of Conservation<br>P.O. Box 10-420, Wellington


#### Abstract

During the 1992/93 banding year 23,659 birds of 101 species were banded and 378 previously banded birds were re-banded, bringing the grand total of individual birds banded in New Zealand over the years since 1950 to $1,129,653$. Two species previously not banded, South Georgian Diving Petrel and Terek Sandpiper, were banded during the year. A total of 2852 recoveries was added to the computer files. Bird banding supported a large variety of research projects and was regulated by 25 individual permits and 43 institutional/group permits.


## 1. INTRODUCTION

Bird banding (ringing) is recognised worldwide as an important research tool for both amateur and professional ornithologists. In New Zealand it has been recognised officially as such since 1950, when the Ornithological Society of New Zealand started the first organised scheme. The Department of Internal Affairs soon followed with its own scheme 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.

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 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 1992/93 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 1992 and 31 March 1993. However, they may include some records for birds banded in previous years, because schedules not received in time for inclusion in the 1991/92 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 Tables 2 and 4.

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 (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 existing computer programmes, we have decided to adhere to the previous edition.

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 $1992 / 93$ banding season 23,659 birds of 101 species were banded and 378 previously banded birds were re-banded. Non-game species contributed 21,846 ( $92.3 \%$ ) and game species $1,813(7.7 \%)$ to the new birds banded. Once again there was a marked decline in the number of game birds banded. Numbers fell from 2,754 in $1991 / 92$ to the present 1,813 , a decline of just over $34 \%$ during this report year. The number of non-game birds increased by $8.6 \%$ in comparison with the previous year.

The total number of birds banded in New Zealand increased to 1,129,653 (previously $1,105,994)$. Of these birds $164,815(14.5 \%)$ have been recovered at least once, while many of them have been recovered on multiple occasions.

The total number of species banded during the existence of the Scheme increased by two to 233. The South Georgian Diving Petrel (Pelecanoides georgicus) and Terek Sandpiper (Xenus cinereus) were banded for the first time.

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

Table 2 summarises by age and sex the birds banded during the 1992/93 season. Also included in this table are the 378 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.

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.

## 4. RECOVERIES

A total of 2,843 recoveries was coded and added to our computer database. Not all these recoveries were received during the report year. A number of the records go back to previous years and are mostly operator recoveries. There is a steadily growing backlog in data input, especially in the non-game sector of these recoveries. All data entry is now done in the Banding Office, while previously this was done by contracted outside agencies.

A large number of recoveries was reported by the general public. The handling of these recoveries has precedence over other recoveries. 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 even during the hunting season 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 well as maintaining the standing of the Department. As mentioned in a previous report, the New Zealand National Banding Scheme continues to have the fastest response time for public recoveries in the world as well as the highest recovery rate!

Of the 2,843 recoveries processed during the year 454 records ( $16 \%$ ) were for birds recovered dead and 2,389 ( $84 \%$ ) for birds recovered alive (either actively caught, or sight recoveries of birds with individual colour combinations, or readable bands). Of all these recoveries 1,092 birds ( $38.4 \%$ ) have been recovered at least once before.

Of the 454 birds recovered dead, 189 ( $41.6 \%$ ) were game and $265(58.4 \%)$ were nongame species. The 2,389 live recoveries consisted of 4 ( $0.2 \%$ ) game and 2,385 ( $99.8 \%$ ) non-game birds.

The 1,092 repeat recoveries (individuals who had been previously recovered) were made up of $14(1.3 \%)$ game and 1,078 ( $98.7 \%$ ) non-game species.
Dead and live recoveries combined for each species group are 193 (6.8\%) and 2,650 (93.2\%) respectively.

At the end of the 1992/93 year the computer files held recovery records for 164,815 individual birds. The total number of recoveries of these individuals including repeat recoveries stood at 263,232.

### 4.1 Some notable recoveries

Two Southern Giant Petrels (Macronectes giganteus), banded by Cemave, the conservation organisation in Brazil, were recovered in New Zealand. Both were banded as chicks at Stinker Point, Elephant Island, South Shetlands (Lat 61²0' S, Long $55^{\circ} 20^{\prime} \mathrm{W}$ ).

V-20751 was banded on 19/2/92 and was recovered dead on 18/9/92 on Bay View beach, Napier.

V-09433 was banded on 23/2/90. The bird was caught on a longline off the West Coast (Lat $42^{\circ} 36^{\prime}$ S, Long $170^{\circ} 31^{\prime} \mathrm{E}$ ) on $10 / 9 / 92$. The band was removed but the bird escaped alive and healthy.

A Northern Giant Petrel (Macronectes halli) with band 9-73368 (South African Banding Scheme) was found dead on a beach just north of the Waikato River mouth on $25 / 10 / 93$. This bird was banded on 25/1/92 at Marion Island, Southern Ocean (Lat $46^{\circ} 54^{\prime} \mathrm{S}, 37^{\circ} 45^{\prime} \mathrm{E}$ ).

Sooty Shearwater (Puffinus griseus) Z-26757, banded as an adult of unknown sex on 7/2/91 at Kauwahaia Island, Te Henga, was recovered dead on 15/7/93. It was found on the beach at Fort Canby, Washington State, USA (Lat $46^{\circ} 15^{\prime} \mathrm{N}, 124^{\circ} \mathrm{W}$ ). The bird was last caught on the colony in December 1992.

Two Fluttering Shearwaters (Puffinus gavia) banded on Maud Island, Marlborough Sounds were recovered in Australia.

X-9712 was banded as a chick on 7/1/93. It was found dead at Shelly Beach, Phillip Island, Victoria (Lat $38^{\circ} 31^{\prime} \mathrm{S}$, Long $145^{\circ} 08^{\prime} \mathrm{E}$ ) on 25/4/93.

X-9802 was also banded as a chick on 7/1/93. This bird was found sick at Moonta Bay, York Peninsula, Southern Australia (Lat $38^{\circ} 0 Y S$, Long $137^{\circ} 33^{\prime}$ E) on $28 / 2 / 93$. Attempts to rehabilitate the bird failed and it died subsequently.

Two Southern Royal Albatrosses (Diomedea e. epomophora), both banded on Campbell Island, fell victim to longlining fishing vessels well away from New Zealand.

R-13881 was banded as a breeding adult on $16 / 1 / 68$. It was caught in the Indian Ocean (Lat $38^{\circ} \mathrm{S}$, Long $106^{\circ} \mathrm{E}$ ) about August 1990.

R-39001, banded as a chick on $1 / 10 / 80$ was caught on 5/7/92 in the Atlantic Ocean at Lat $42^{\circ} 45^{\prime} \mathrm{S}$, Long $2^{\circ} 46^{\prime} \mathrm{W}$.

A Godwit, presumably banded on 6/8/93 at Kgun Lake, Yukon Delta, Alaska was sighted at Miranda, Firth of Thames on $16 / 10 / 93$. The bird was banded as an Hudsonian Godwit (although the operator agrees that one of his less experienced helpers may have identified the bird wrongly) and recovered as a Bar-tailed Godwit. Confusion reigns as both species breed in the same area!

A steady stream of recaptures of Knots (Calidris c. canutus) and Banded Dotterels (Charadrius b. bicinctus), banded on either side of the Tasman was (and still is!) received by the Banding Office.

### 4.2 Leg flags

The use of leg flags (rather than colour bands) on waders has increased markedly internationally and is providing interesting results. As mentioned in earlier reports different coloured flags are used in different areas along the East Asian-Australasian Flyway. The colour allocated to birds banded in New Zealand is white, although some South Island Pied Oystercatchers (Haematopus ostralegus finschi), not known to leave New Zealand, have been marked with yellow flags.

One of the highlights of the flagging project is the sighting of 3 Bar-tailed Godwits (Limosa lapponica) in the same roosting flock at the Ariake Sea, Kyushu, Japan in April 1992. These birds had white, orange and green flags respectively. So one was banded in New Zealand, the others in Queensland and Victoria.

Within New Zealand, many sightings of Australian banded Knots and Godwts were reported from as far south as Lake Ellesmere.

The co-operation between the banding schemes along the flyways is very important and the above mentioned results show that the flagging schemes are succesful and will provide us with increased knowledge and understanding of the migration of many of our birds.

## 5. REQUESTS FOR INFORMATION

The New Zealand National Banding Scheme has serviced a range of requests for information and analyses in 1992/93, both national and international. Among these were: Life expectancy analyses for game birds (Mallards and Paradise Shelduck) Wading bird dispersal and migration patterns
Albatross movements and by-catch issues
Some informative field courses were organised for members of the Conservation Corps. These involved an introduction to the purposes and practice of banding in general, with an emphasis on general biology, dispersal, etc., of seabirds around Wellington Harbour, specifically those species living on Somes Island.

## 6. ACKNOWLEDGEMENTS

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

Table 1 General banding totals (rebands excluded).

| Species number and name |  | Total | Total | Total for |
| :---: | :---: | :---: | :---: | :---: |
| 001 | NORTH ISLAND BROWN KIWI | 332 | 20 | 352 |
| 002 | SOUTH ISLAND BROWN KIWI | 4 | 0 | 4 |
| 003 | STEWART ISLAND BROWN KIWI | 21 | 0 | 21 |
| 004 | LITTLE SPOTTED KIWI | 143 | 70 | 213 |
| 012 | YELLOW-EYED PENGUIN | 4374 | 250 | 4624 |
| 026 | NORTHERN BLUE PENGUIN | 615 | 36 | 651 |
| 014 | COOK STRAIT BLUE PENGUIN | 2088 | 102 | 2190 |
| 016 | WHITE-FLIPPERED BLUE PENGUIN | 12179 | 610 | 12789 |
| 015 | SOUTHERN BLUE PENGUIN | 903 | 421 | 1324 |
| 027 | CHATHAM ISLAND BLUE PENGUIN | 15 | 0 | 15 |
| 017 | ROCKHOPPER PENGUIN | 2405 | 0 | 2405 |
| 019 | FIORDLAND CRESTED PENGUIN | 642 | 26 | 668 |
| 020 | SNARES CRESTED PENGUIN | 2179 | 0 | 2179 |
| 021 | ERECT CRESTED PENGUIN | 43 | 0 | 43 |
| 041 | WANDERING ALBATROSS | 3201 | 214 | 3415 |
| 044 | NORTHERN ROYAL ALBATROSS | 2804 | 159 | 2963 |
| 043 | SOUTHERN ROYAL ALBATROSS | 32693 | 654 | 33347 |
| 045 | BLACK-BROWED MOLLYMAWK | 13 | 5 | 18 |
| 046 | NEW ZEALAND BLACK-BROWED MOLLYMAWK | 22518 | 677 | 23195 |
| 047 | GREY HEADED MOLLYMAWK | 6389 | 213 | 6602 |
| 049 | BULLER'S MOLLYMAWK | 2276 | 399 | 2675 |
| 050 | WHITE-CAPPED (SHY) MOLLYMAWK | 561 | 30 | 591 |
| 052 | SALVIN'S MOLLYMAWK | 1296 | 0 | 1296 |
| 051 | CHATHAM ISLAND MOLLYMAWK | 2 | 545 | 547 |
| 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 | 0 | 873 |
| 062 | CAPE PIGEON | 6800 | 0 | 6800 |
| 093 | GREY-FACED PETREL | 19115 | 1093 | 20208 |
| 094 | WHITE-HEADED PETREL | 31 | 0 | 31 |
| 095 | WHITE-NAPED PETREL | 516 | 0 | 516 |
| 098 | MOTTLED PETREL | 418 | 31 | 449 |
| 110 | SOFT-PLUMAGED PETREL | 20 | 0 | 20 |
| 100 | KERMADEC PETREL | 1056 | 0 | 1056 |
| 111 | CHATHAM ISLAND TAIKO | 47 | 3 | 50 |
| 101 | PYCROFT'S PETREL | 642 | 237 | 879 |
| 102 | GOULD'S PETREL | 1 | 0 | 1 |
| 104 | COOK'S PETREL | 331 | 5 | 336 |
| 106 | BLACK-WINGED PETREL | 2818 | 0 | 2818 |
| 105 | CHATHAM ISLAND PETREL | 49 | 0 | 49 |
| 065 | BLUE PETREL | 1 | 0 | 1 |
| 066 | BROAD-BILLED PRION | 1590 | 0 | 1590 |
| 069 | ANTARCTIC PRION | 20 | 0 | 20 |
| 071 | AUCKLAND ISLAND PRION | 24 | 0 | 24 |
| 072 | NARROW-BILLED PRION | 1 | 0 | 1 |
| 073 | FAIRY PRION | 43592 | 0 | 43592 |
| 075 | FULMAR PRION | 61 | 0 | 61 |
| 074 | CHATHAM FULMAR PRION | 2 | 0 | 2 |
| 089 | GREY PETREL | 8 | 0 | 8 |
| 090 | BLACK PETREL | 950 | 57 | 1007 |
| 091 | WESTLAND BLACK PETREL | 3698 | 220 | 3918 |


| Species number and name |  | Total | Total | Total for |
| :---: | :---: | :---: | :---: | :---: |
| 092 | WHITE-CHINNED PETREL | 31 | 0 | 31 |
| 077 | FLESH-FOOTED SHEARWATER | 1782 | 21 | 1803 |
| 078 | WEDGE-TAILED SHEARWATER | 461 | 0 | 461 |
| 079 | BULLER'S SHEARWATER | 1049 | 0 | 1049 |
| 080 | SOOTY SHEARWATER | 6821 | 154 | 6975 |
| 115 | CHRISTMAS ISLAND SHEARWATER | 1 | 0 | 1 |
| 082 | FLUTTERING SHEARWATER | 1787 | 65 | 1852 |
| 083 | HUTTON'S SHEARWATER | 1134 | 0 | 1134 |
| 084 | NORFOLK ISLAND LITTLE SHEARWATER | 1 | 0 | 1 |
| 085 | KERMADEC LITTLE SHEARWATER | 354 | 0 | 354 |
| 086 | NORTH ISLAND LITTLE (ALLIED) SHEARWATER | 500 | 133 | 633 |
| 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 | 776 | 0 | 776 |
| 124 | WHITE-FACED STORM PETREL | 6575 | 0 | 6575 |
| 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 | 7139 | 27 | 7166 |
| 133 | SUBANTARCTIC DIVING PETREL | 19 | 0 | 19 |
| 132 | SOUTHERN DIVING PETREL | 104 | 1 | 105 |
| 134 | SOUTH GEORGIAN DIVING PETREL | 0 | 4 | 4 |
| 135 | DIVING PETREL (sp.) | 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 | 17913 | 0 | 17913 |
| 162 | BROWN BOOBY | 1 | 0 | 1 |
| 163 | MASKED (BLUE-FACED) BOOBY | 446 | 0 | 446 |
| 171 | BLACK SHAG | 522 | 18 | 540 |
| 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 |
| 182 | SPOTTED SHAG | 465 | 26 | 491 |
| 216 | WHITE-FACED HERON | 14 | 0 | 14 |
| 213 | WHITE HERON | 2 | 0 | 2 |
| 215 | REEF HERON | 55 | 13 | 68 |
| 220 | CATTLE EGRET | 1 | 0 | 1 |
| 218 | BITTERN | 7 | 0 | 7 |
| 233 | ROYAL SPOONBILL | 17 | 26 | 43 |
| 242 | MUTE SWAN | 4 | 0 | 4 |
| 243 | BLACK SWAN | (59980) | 0 | (59980) |
| 241 | CANADA GOOSE | (54144) | 329 | (54473) |
| 245 | PARADISE SHELDUCK | (68906) | 219 | (69125) |
| 252 | MALLARD | (89954) | 0 | (89954) |
| 259 | HYBRID MALLARD (CROSS) | (1761) | 0 | (1761) |
| 251 | GREY DUCK | (34225) | 0 | (34225) |
| 247 | GREY TEAL | (1490) | 0 | (1490) |
| 248 | BROWN TEAL | (1797) | 0 | (1797) |


| Species number and name | Total | Total | Total for |
| :--- | :--- | ---: | ---: | ---: |
| all years |  |  |  |


| Species number and name |  | $\begin{array}{r} \text { Total } \\ \text { pre-1992 } \end{array}$ | $\begin{array}{r} \text { Total } \\ 1992 / 93 \end{array}$ | Total for all years |
| :---: | :---: | :---: | :---: | :---: |
| 525 | BLACK-FRONTED TERN | 1372 | 15 | 1387 |
| 529 | ANTARCTIC TERN | 158 | 0 | 158 |
| 531 | FAIRY TERN | 14 | 5 | 19 |
| 532 | WHITE-FRONTED TERN | 23600 | 54 | 23654 |
| 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 | 174 | 0 | 174 |
| 552 | CHATHAM ISLAND PIGEON | 21 | 24 | 45 |
| 553 | ROCK PIGEON | 60 | 0 | 60 |
| 554 | MALAY SPOTTED DOVE | 10 | 0 | 10 |
| 555 | BARBARY DOVE | 1 | 0 | 1 |
| 561 | KAKAPO | 81 | 3 | 84 |
| 562 | NORTH ISLAND KAKA | 20 | 51 | 71 |
| 563 | SOUTH ISLAND KAKA | 69 | 13 | 82 |
| 564 | KEA | 1409 | 13 | 1422 |
| 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 | 133 | 9 | 142 |
| 574 | CHATHAM ISLAND YELLOW-CROWNED PARAKEET | 9 | 0 | 9 |
| 583 | SHINING CUCKOO | 71 | 1 | 72 |
| 584 | LONG-TAILED CUCKOO | 4 | 0 | 4 |
| 601 | MOREPORK | 51 | 0 | 51 |
| 604 | LITTLE OWL | 16 | 0 | 16 |
| 621 | NEW ZEALAND KINGFISHER | 252 | 13 | 265 |
| 641 | NORTH ISLAND RIFLEMAN | 150 | 0 | 150 |
| 642 | SOUTH ISLAND RIFLEMAN | 1103 | 25 | 1128 |
| 646 | ROCK WREN | 9 | 0 | 9 |
| 651 | SKYLARK | 42 | 0 | 42 |
| 662 | WELCOME SWALLOW | 362 | 21 | 383 |
| 741 | NEW ZEALAND PIPIT | 47 | 2 | 49 |
| 731 | HEDGESPARROW | 2309 | 90 | 2399 |
| 701 | NORTH ISLAND FERNBIRD | 34 | 0 | 34 |
| 702 | SOUTH ISLAND FERNBIRD | 257 | 1 | 258 |
| 703 | STEWART ISLAND FERNBIRD | 27 | 0 | 27 |
| 706 | SNARES FERNBIRD | 152 | 0 | 1-52 |
| 711 | BROWN CREEPER | 297 | 0 | 297 |
| 712 | WHITEHEAD | 363 | 0 | 363 |
| 713 | YELLOWHEAD | 133 | 15 | 148 |
| 714 | GREY WARBLER | 1052 | 39 | 1091 |
| 715 | CHATHAM ISLAND WARBLER | 74 | 0 | 74 |
| 681 | NORTH ISLAND FANTAIL | 631 | 42 | 673 |
| 682 | SOUTH ISLAND FANTAIL | 870 | 7 | 877 |
| 684 | PIED TIT | 175 | 0 | 175 |
| 685 | YELLOW-BREASTED TIT | 420 | 0 | 420 |
| 686 | CHATHAM ISLAND TIT | 37 | 0 | 37 |
| 687 | BLACK TIT | 161 | 0 | 161 |


| Species number and name |  | Total | Total | Total for |
| :---: | :---: | :---: | :---: | :---: |
| 689 | NORTH ISLAND ROBIN | 65 | 53 | 118 |
| 690 | SOUTH ISLAND ROBIN | 2431 | 97 | 2528 |
| 691 | STEWART ISLAND ROBIN | 10 | 0 | 10 |
| 692 | BLACK ROBIN | 286 | 0 | 286 |
| 721 | SONG THRUSH | 3176 | 136 | 3312 |
| 722 | BLACKBIRD | 7227 | 334 | 7561 |
| 761 | SILVEREYE | 64955 | 4919 | 69874 |
| 751 | STITCHBIRD | 330 | 68 | 398 |
| 753 | BELLBIRD | 5999 | 52 | 6051 |
| 755 | TUI | 961 | 4 | 965 |
| 756 | CHATHAM ISLAND TUI | 1 | 0 | 1 |
| 775 | YELLOWHAMMER | 1027 | 73 | 1100 |
| 776 | CIRL BUNTING | 27 | 0 | 27 |
| 774 | CHAFFINCH | 2974 | 157 | 3131 |
| 771 | GREENFINCH | 7616 | 574 | 8190 |
| 772 | GOLDFINCH | 3288 | 163 | 3451 |
| 773 | REDPOLL | 8068 | 25 | 8093 |
| 781 | HOUSE SPARROW | 31867 | 1882 | 33749 |
| 791 | STARLING | 18040 | 210 | 18250 |
| 792 | INDIAN MYNA | 1399 | 2 | 1401 |
| 821 | NORTH ISLAND SADDLEBACK | 1959 | 238 | 2197 |
| 822 | SOUTH ISLAND SADDLEBACK | 289 | 0 | 289 |
| 824 | NORTH ISLAND KOKAKO | 71 | 79 | 150 |
| 811 | BLACK-BACKED MAGPIE | 41 | 0 | 41 |
| 812 | WHITE-BACKED MAGPIE | 259 | 0 | 259 |
| 813 | HYBRID MAGPIE | 25 | 0 | 25 |
| --- | MAGPIE SPECIES | [4] | 0 | [4] |
| 802 | ROOK | 1070 | 0 | 1070 |
|  | Total | 1105994 | 23659 | 1129653 |

[ ] 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. (For column headings abbreviations, see end of Table)

| Species number and name |  | PU | JM | JF | JU | AM | AF | AU | UM | OF | UU | RB | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 001 | NORTH ISLAND BROWN KIWI | 0 | 0 | 0 | 8 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 20 |
| 004 | LITTLE SPOTTED KIWI | 0 | 4 | 3 | 5 | 27 | 30 | 0 | 0 | 0 | 1 | 2 | 72 |
| 012 | YELLOW-EYED PENGUIN | 134 | 0 | 0 | 4 | 46 | 44 | 22 | 0 | 0 | 0 | 0 | 250 |
| 026 | NORTHERN BLUE PENGUIN | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| 014 | COOK STRAIT BLUE PENGUIN | 10 | 1 | 1 | 0 | 45 | 44 | 1 | 0 | 0 | 0 | 1 | 103 |
| 016 | WHITE-FLIPPERED BLUE PENGUIN | 610 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 610 |
| 015 | SOUTHERN BLUE PENGUIN | 94 | 0 | 0 | 0 | 31 | 20 | 276 | 0 | 0 | 0 | 0 | 421 |
| 019 | FIORDLAND CRESTED PENGUIN | 25 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 041 | WANDERING ALBATROSS | 14 | 0 | 0 | 0 | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 214 |
| 044 | NORTHERN ROYAL ALBATROSS | 22 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 128 | 0 | 159 |
| 043 | SOUTHERN ROYAL ALBATROSS | 438 | 0 | 0 | 0 | 0 | 0 | 216 | 0 | 0 | 0 | 61 | 715 |
| 045 | BLACK-BROWED MOLLYMAWK | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 5 |
| 046 | NEW ZEALAND BLACK-BROWED MOLLYMAWK | 618 | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 0 | 0 | 48 | 725 |
| 047 | GREY-HEADED MOLLYMAWK | 62 | 0 | 0 | 0 | 0 | 0 | 1-51 | 0 | 0 | 0 | 28 | 241 |
| 049 | BULLER'S MOLLYMAWK | 170 | 0 | 0 | 0 | 0 | 0 | 229 | 0 | 0 | 0 | 0 | 400 |
| 050 | WHITE-CAPPED (SHY) MOLLYMAWK | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 30 |
| 051 | CHATHAM ISLAND MOLLYMAWK | 545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54-5 |
| 093 | GREY-FACED PETREL | 712 | 0 | 0 | 0 | 16 | 5 | 360 | 0 | 0 | 0 | 13 | 1106 |
| 098 | MOTTLED PETREL | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 31 |
| 111 | CHATHAM ISLAND TAIKO | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| 101 | PYCROFT'S PETREL | 92 | 0 | 0 | 0 | 20 | 23 | 102 | 0 | 0 | 0 | 0 | 237 |
| 104 | COOK'S PETREL | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 090 | BLACK PETREL | 5 | 0 | 0 | 0 | 22 | 17 | 12 | 0 | 0 | 1 | 0 | 57 |
| 091 | WESTLAND BLACK PETREL | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 |
| 077 | FLESH-FOOTED SHEARWATER | 0 | 0 | 0 | 0 | 1 | 10 | 10 | 0 | 0 | 0 | 0 | 21 |
| 080 | SOOTY SHEARWATER | 14 | 0 | 0 | 47 | 0 | 0 | 93 | 0 | 0 | 0 | 0 | 154 |
| 082 | FLUTTERING SHEARWATER | 61 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 65 |
| 086 | NORTH ISLAND LITTLE (ALLIED) SHEARWATER | 11 | 0 | 0 | 0 | 0 | 0 | 122 | 0 | 0 | 0 | 0 | 133 |
| 131 | NORTHERN DIVING PETREL | 0 | 0 | 0 | 0 | 1 | 0 | 26 | 0 | 0 | 0 | 0 | 27 |
| 132 | SOUTHERN DIVING PETREL | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 134 | SOUTH GEORGIAN DIVING PETREL | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 171 | BLACK SHAG | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 182 | SPOTTED SHAG | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 215 | REEF HERON | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |


| Species number and name |  | PU | JM | JF | JU | AM | AF | AU | UM | OF | UU | RB | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 233 | ROYAL SPOONBILL | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 241 | CANADA GOOSE | 0 | 126 | 127 | 0 | 26 | 48 | 2 | 0 | 0 | 0 | 0 | 329 |
| 245 | PARADISE SHELDUCK | 0 | 0 | 0 | 0 | 119 | 100 | 0 | 0 | 0 | 0 | 0 | 219 |
| 254 | BLUE DUCK | 0 | 10 | 7 | 8 | 25 | 11 | 0 | 0 | 0 | 0 | 2 | 63 |
| 272 | AUSTRALASIAN HARRIER | 4 | 38 | 34 | 2 | 50 | 37 | 13 | 0 | 0 | 0 | 0 | 178 |
| 281 | NEW ZEALAND FALCON | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 299 | RED-LEGGED PARTRIDGE | 0 | 197 | 221 | 424 | 92 | 78 | 62 | 0 | 0 | 0 | 0 | 1074 |
| 293 | PHEASANT | 0 | 189 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 191 |
| 335 | NORTH ISLAND WEKA | 3 | 26 | 13 | 1 | 36 | 17 | 2 | 0 | 0 | 3 | 2 | 103 |
| 338 | STEWART ISLAND WEKA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 35 |
| 343 | NOTORNIS | 0 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 401 | SOUTH ISLAND PIED OYSTERCATCHER | 27 | 0 | 0 | 70 | 12 | 14 | 356 | 0 | 0 | 0 | 0 | 479 |
| 402 | VARIABLE OYSTERCATCHER | 8 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 13 |
| 413 | LEAST GOLDEN (PACIFIC GOLDEN) PLOVER | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 418 | NEW ZEALAND DOTTEREL | 44 | 0 | 0 | 7 | 7 | 6 | 41 | 0 | 0 | 0 | 5 | 110 |
| 415 | BANDED DOTTEREL | 40 | 0 | 0 | 0 | 40 | 85 | 11 | 0 | 0 | 0 | 8 | 184 |
| 422 | BLACK-FRONTED DOTTEREL | 1 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 36 |
| 419 | NEW ZEALAND SHORE PLOVER | 5 | 0 | 0 | 26 | 4 | 1 | 1 | 0 | 0 | 0 | 98 | 135 |
| 420 | WRYBILL | 3 | 0 | 0 | 49 | 1 | 6 | 746 | 0 | 0 | 344 | 51 | 1200 |
| 445 | EASTERN BAR-TAILED GODWIT | 0 | 0 | 0 | 10 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 70 |
| 448 | TEREK SANDPIPER | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 451 | TURNSTONE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 458 | KNOT | 0 | 0 | 0 | 95 | 0 | 0 | 881 | 0 | 0 | 0 | 6 | 982 |
| 461 | CURLEW SANDPIPER | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 15 |
| 462 | RED-NECKED STINT | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 481 | PIED STILT | 80 | 0 | 0 | 1 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 116 |
| 521 | SOUTHERN BLACK-BACKED GULL | 1157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1157 |
| 523 | RED-BILLED GULL | 478 | 0 | 0 | 0 | 36 | 59 | 0 | 0 | 0 | 0 | 37 | 610 |
| 524 | BLACK-BILLED GULL | 426 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 432 |
| 527 | CASPIAN TERN | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| 525 | BLACK-FRONTED TERN | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 531 | FAIRY TERN | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 532 | WHITE-FRONTED TERN | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 |
| 552 | CHATHAM ISLAND PIGEON | 2-3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 24 |
| 561 | KAKAPO | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 |
| 562 | NORTH ISLAND KAKA | 0 | 14 | 8 | 4 | 14 | 11 | 0 | 0 | 0 | 0 | 0 | 51 |


| Species number and name |  | PU | JM | JF | JU | AM | AF | AU | UM | OF | UU | RB | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 563 | SOUTH ISLAND KAKA | 0 | 0 | 0 | 6 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 13 |
| 564 | KEA | 0 | 8 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 13 |
| 573 | YELLOW-CROWNED PARAKEET | 0 | 1 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 583 | SHINING CUCKOO | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 621 | NEW ZEALAND KINGFISHER | 0 | 0 | 0 | 8 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 13 |
| 642 | SOUTH ISLAND RIFLEMAN | 0 | 7 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 662 | WELCOME SWALLOW | 0 | 0 | 0 | 2 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 21 |
| 741 | NEW ZEALAND PIPIT | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 731 | HEDGESPARROW | 0 | 0 | 0 | 11 | 0 | 0 | 71 | 0 | 0 | 8 | 0 | 90 |
| 702 | SOUTH ISLAND FERNBIRD | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 713 | YELLOWHEAD | 2 | 0 | 0 | 0 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 15 |
| 714 | GREY WARBLER | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 1 | 0 | 39 |
| 681 | NORTH ISLAND FANTAIL | 0 | 0 | 0 | 10 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 42 |
| 682 | SOUTH ISLAND FANTAIL | 0 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 7 |
| 689 | NORTH ISLAND ROBIN | 9 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 23 | 0 | 53 |
| 690 | SOUTH ISLAND ROBIN | 7 | 0 | 0 | 39 | 21 | 19 | 10 | 0 | 0 | 1 | 0 | 97 |
| 721 | SONG THRUSH | 0 | 0 | 0 | 23 | 0 | 0 | 99 | 0 | 0 | 14 | 0 | 136 |
| 722 | BLACKBIRD | 2 | 35 | 34 | 32 | 130 | 95 | 2 | 0 | 1 | 3 | 1 | 335 |
| 761 | SILVEREYE | 0 | 0 | 0 | 18 | 0 | 0 | 4901 | 0 | 0 | 0 | 0 | 4919 |
| 751 | STITCHBIRD | 8 | 4 | 5 | 0 | 27 | 24 | 0 | 0 | 0 | 0 | 0 | 68 |
| 753 | BELLBIRD | 0 | . 5 | 0 | 1 | 8 | 4 | 34 | 0 | 0 | 0 | 0 | 52 |
| 755 | TUI | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 775 | YELLOWHAMMER | 0 | 1 | 0 | 1 | 44 | 26 | 0 | 0 | 0 |  | 0 | 73 |
| 774 | CHAFFINCH | 0 | 15 | 13 | 1 | 58 | 62 | 5 | 0 | 0 | 3 | 0 | 157 |
| 771 | GREENFINCH | 0 | 40 | 58 | 3 | 273 | 162 | 30 | 1 | 2 | 5 | 0 | 574 |
| 772 | GOLDFINCH | 0 | 3 | 5 | 12 | 69 | 37 | 37 | 0 | 0 | 0 | 0 | 163 |
| 773 | REDPOLL | 0 | 1 | 0 | 0 | 13 | 9 | 2 | 0 | 0 | 0 | 0 | 25 |
| 781 | HOUSE SPARROW | 0 | 197 | 162 | 284 | 709 | 506 | 24 | 0 | 0 | 0 | 0 | 1882 |
| 791 | STARLING | 0 | 6 | 5 | 48 | 31 | 31 | 89 | 0 | 0 | 0 | 0 | 210 |
| 792 | INDIAN MYNA | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 821 | NORTH ISLAND SADDLEBACK | 74 | 4 | 4 | 5 | 81 | 48 | 2 | 0 | 0 | 20 | 2 | 240 |
| 824 | NORTH ISLAND KOKAK0 | 32 | 0 | 0 | 1 | 8 | 6 | 32 | 0 | 0 | 0 | 0 | 79 |
|  | Total | 6503 | 936 | 729 | 1273 | 2196 | 1715 | 9710 | 1 | 3 | 593 | 378 | 24037 |


| Abbreviations used in the column headings: |  |  |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{P U}=$ Pullus of unknown sex | $\mathbf{J M}=$ Juvenile male | $\mathbf{J F}=$ Juvenile female | $\mathbf{A M}=$ Adult male |
| $\mathbf{A U}=$ Adult of unknown sex | $\mathbf{U M}=$ Male of unknown age | $\mathbf{O F}=$ Female of unknown age | $\mathbf{U U}=$ Unknown age and sex |

Table 3 Recoveries added to the computer files during the report year. (Figures in the repeat column are already incorporated in the the total column.)

| Species number and name |  | Dead | Alive | Total | Repeat |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 012 | YELLOW-EYED PENGUIN | 3 | 9 | 12 | 1 |
| 026 | NORTHERN BLUE PENGUIN | 1 | 0 | 1 | 0 |
| 014 | COOK STRAIT BLUE PENGUIN | 3 | 45 | 48 | 31 |
| 016 | WHITE-FLIPPERED BLUE PENGUIN | 32 | 278 | 310 | 203 |
| 041 | WANDERING ALBATROSS | 0 | 13 | 13 | 0 |
| 044 | NORTHERN ROYAL ALBATROSS | 0 | 2 | 2 | 0 |
| 043 | SOUTHERN ROYAL ALBATROSS | 1 | 0 | 1 | 0 |
| 046 | NEW ZEALAND BLACK-BROWED | 1 | 0 | 1 | 0 |
| MOLLYMAWK |  |  |  |  |  |
| 109 | NORTHERN GIANT PETREL | 0 | 1 | 1 | 0 |
| 093 | GREY FACED PETREL | 2 | 10 | 12 | 0 |
| 111 | CHATHAM ISLAND TAIKO | 0 | 1 | 1 | 0 |
| 101 | PYCROFT'S PETREL | 0 | 1 | 1 | 0 |
| 104 | COOK'S PETREL | 0 | 5 | 5 | 1 |
| 066 | BROAD-BILLED PRION | 0 | 1 | 1 | 0 |
| 073 | FAIRY PRION | 1 | 88 | 89 | 37 |
| 090 | BLACK PETREL | 2 | 3 | 5 | 0 |
| 091 | WESTLAND BLACK PETREL | 6 | 30 | 36 | 19 |
| 080 | SOOTY SHEARWATER | 0 | 1 | 1 | 1 |
| 086 | NORTH ISLAND LITTLE (ALLIED) | 0 | 2 | 2 | 0 |
| SHEARWATER |  |  |  |  |  |
| 161 | AUSTRALASIAN GANNET | 15 | 2 | 17 | 3 |
| 173 | LITTLE BLACK SHAG | 1 | 0 | 1 | 0 |
| 182 | SPOTTED SHAG | 2 | 0 | 2 | 0 |
| 233 | ROYAL SPOONBILL | 0 | 40 | 40 | 34 |
| 243 | BLACK SWAN | 38 | 1 | 39 | 0 |
| 241 | CANADA GOOSE | 20 | 1 | 21 | 5 |
| 245 | PARADISE SHELDUCK | 57 | 0 | 57 | 7 |
| 252 | MALLARD | 38 | 1 | 39 | 2 |
| 253 | NEW ZEALAND SHOVELER | 3 | 0 | 3 | 0 |
| 254 | BLUE DUCK | 1 | 0 | 1 | 1 |
| 272 | AUSTRALASIAN HARRIER | 15 | 41 | 56 | 20 |
| 299 | RED-LEGGED PARTRIDGE | 1 | 0 | 1 | 0 |
| 293 | PHEASANT | 32 | 1 | 33 | 0 |
| 335 | NORTH ISLAND WEKA | 0 | 11 | 11 | 6 |
| 401 | SOUTH ISLAND PIED OYSTERCATCHER | 0 | 84 | 84 | 23 |
| 402 | VARIABLE OYSTERCATCHER | 2 | 1 | 3 | 1 |
| 418 | NEW ZEALAND DOTTEREL | 2 | 160 | 162 | 107 |
| 415 | BANDED DOTTEREL | 0 | 1 | 1 | 0 |
| 420 | WRYBILL | 0 | 3 | 3 | 2 |
| 445 | EASTERN BAR-TAILED GODWIT | 1 | 2 | 3 | 1 |
| 454 | SNARES ISLAND SNIPE | 0 | 133 | 133 | 121 |
| 458 | KNOT | 2 | 9 | 11 | 0 |
| 481 | PIED STILT | 1 | 108 | 109 | 59 |
| 482 | BLACK STILT | 0 | 1 | 1 | 0 |
| 521 | SOUTHERN BLACK-BACKED GULL | 60 | 26 | 86 | 1 |
| 523 | RED-BILLED GULL | 37 | 859 | 896 | 135 |
| 524 | BLACK-BILLED GULL | 1 | 1 | 2 | 0 |
| 527 | CASPIAN TERN | 2 | 13 | 15 | 11 |
| 529 | ANTARCTIC TERN | 0 | 13 | 13 | 6 |
| 531 | FAIRY TERN | 0 | 1 | 1 | 0 |


| Species number and name | Dead | Alive | Total | Repeat |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 532 | WHITE-FRONTED TERN | 2 | 0 | 2 | 0 |
| 562 | NORTH ISLAND KAKA | 2 | 3 | 5 | 0 |
| 564 | KEA | 2 | 3 | 5 | 2 |
| 731 | HEDGESPARROW | 1 | 1 | 2 | 0 |
| 690 | SOUTH ISLAND ROBIN | 1 | 1 | 2 | 0 |
| 721 | SONG THRUSH | 3 | 2 | 5 | 0 |
| 722 | BLACKBIRD | 10 | 1 | 11 | 0 |
| 761 | SILVEREYE | 14 | 357 | 371 | 250 |
| 751 | STITCHBIRD | 0 | 2 | 2 | 2 |
| 753 | BELLBIRD | 4 | 0 | 4 | 0 |
| 774 | CHAFFINCH | 1 | 0 | 1 | 0 |
| 771 | GREENFINCH | 3 | 0 | 3 | 0 |
| 772 | GOLDFINCH | 1 | 0 | 1 | 0 |
| 781 | HOUSE SPARROW | 23 | 3 | 26 | 0 |
| 791 | STARLING | 4 | 0 | 4 | 0 |
| 821 | NORTH ISLAND SADDLEBACK | 0 | 13 | 13 | 0 |
|  | Total | $\mathbf{4 5 4}$ | $\mathbf{2 3 8 9}$ | $\mathbf{2 8 4 3}$ | $\mathbf{1 0 9 2}$ |

Table 4 Summary per permit (rebands included).


| Permit holder | Birds Banded | Permit holder | Birds <br> Banded |
| :---: | :---: | :---: | :---: |
| PERMIT 0179 SOUTH CANTERBURY FISH |  | SONG THRUSH | 7 |
| \& GAME COUNCIL |  | BLACKBIRD | 18 |
| PARADISE SHELDUCK | 219 | SILVEREYE | 282 |
| RED-LEGGED PARTRIDGE | 400 | YELLOWHAMMER | 1 |
| Subtotal | 619 | CHAFFINCH | 30 |
|  |  | GREENFINCH | 68 |
| PERMIT 0215 TORR O C |  | GOLDFINCH | 1 |
| HEDGESPARROW | 1 | HOUSE SPARROW | 1 |
| SONG THRUSH | 4 | STARLING | 17 |
| BLACKBIRD | 2 | Subtotal | 466 |
| SILVEREYE | 28 |  |  |
| YELLOWHAMMER | 1 | PERMIT 0275 BEAUCHAMP A J |  |
| CHAFFINCH | 1 | NORTH ISLAND WEKA | 59 |
| HOUSE SPARROW | 54 | Subtotal | 59 |
| STARLING | 13 |  |  |
| INDIAN MYNA Subtotal | 2 | PERMIT 0277 SHERLEY G H |  |
|  | 106 | SOUTH ISLAND RIFLEMAN | 25 |
|  |  | Subtotal | 25 |
| PERMIT 0243 SIM D M |  |  |  |
| FLESH-FOOTED SHEARWATER | 3 | PERMIT 0278 N Z WADER STUDY GROUP |  |
| AUSTRALASIAN HARRIER | 14 | SOUTH ISLAND PIED OYSTERCATC | HER419 |
| SILVEREYE Subtotal | 228 | LEAST GOLDEN PLOVER |  |
|  | 245 | (PACIFIC GOLDEN PLOVER) | 1 |
|  |  | NEW ZEALAND DOTTEREL |  |
| PERMIT 0244 POWLESLAND DR R G |  | BANDED DOTTEREL | 3 |
| BLACK SHAG | 18 | WRYBILL | 1183 |
| CHATHAM ISLAND PIGEON | 24 | EASTERN BAR-TAILED GODWIT | 70 |
| Subtotal | 42 | TEREK SANDPIPER | 1 |
|  |  | TURNSTONE | 1 |
| PERMIT 0246 PIERCE R J |  | KNOT | 982 |
| FAIRY TERN Subtotal | 5 | CURLEW SANDPIPER | 15 |
|  | 5 | RED-NECKED STINT | 2 |
|  |  | PIED STILT | 2 |
| PERMIT 0257 ONLEY D J |  | Subtotal | 2680 |
| HEDGESPARROW | 3 |  |  |
| GREY WARBLER | 2 | PERMIT 0282 DUCKS UNLIMITED (N |  |
| SONG THRUSH | 1 | CANADA GOOSE | 112 |
| BLACKBIRD | 2 | Subtotal | 112 |
| SILVEREYE | 275 |  |  |
| YELLOWHAMMER | 2 | PERMIT 0285 RAPTOR ASSOCIATION | N OF NZ |
| CHAFFINCH | 4 | AUSTRALASIAN HARRIER | 47 |
| GREENFINCH | 41 | NEW ZEALAND FALCON | 7 |
| GOLDFINCH | 4 | Subtotal | 54 |
| REDPOLL | 1 |  |  |
| HOUSE SPARROW | 45 | PERMIT 0291 |  |
| STARLING Subtotal | 1 | NORTHLAND/FAR NORTH REG O | SNZ |
|  | 381 | SOUTHERN BLACK-BACKED GULL | 116 |
|  |  | Subtotal | 116 |
| PERMIT 0259 MASSEY UNIVERSITY |  |  |  |
| NORTH ISLAND WEKA | 32 | PERMIT 0292 ROWE L K |  |
| HEDGESPARROW | 1 | HEDGESPARROW | 1 |
| GREY WARBLER | 1 | BLACKBIRD | 25 |
| NORTH ISLAND FANTAIL | 7 | SILVEREYE | 49 |
|  |  | Subtotal | 75 |


| Permit holder $\quad$ B | Birds Banded | Permit holder | Birds <br> Banded |
| :---: | :---: | :---: | :---: |
| PERMIT 0294 |  | WELCOME SWALLOW | 20 |
| CANTERBURY PASSERINE GROUP |  | NEW ZEALAND PIPIT | 2 |
| HEDGESPARROW | 14 | HEDGESPARROW | 66 |
| GREY WARBLER | 4 | SOUTH ISLAND FERNBIRD | 1 |
| SOUTH ISLAND FANTAIL | 4 | GREY WARBLER | 28 |
| SONG THRUSH | 7 | NORTH ISLAND FANTAIL | 31 |
| BLACKBIRD | 29 | SOUTH ISLAND FANTAIL | 2 |
| SILVEREYE | 606 | SONG THRUSH | 87 |
| BELLBIRD | 17 | BLACKBIRD | 195 |
| CHAFFINCH | 11 | SILVEREYE | 2069 |
| GREENFINCH | 13 | BELLBIRD | 8 |
| GOLDFINCH | 10 | TUI | 1 |
| REDPOLL | 3 | YELLOWHAMMER | 69 |
| HOUSE SPARROW | 65 | CHAFFINCH | 77 |
| STARLING | 4 | GREENFINCH | 358 |
| Subtotal | 787 | GOLDFINCH | 127 |
|  |  | REDPOLL | 21 |
| PERMIT 0295 CANTERBURY UNIVERSITY |  | HOUSE SPARROW | 1271 |
| FIORDLAND CRESTED PENGUIN | 26 | STARLING | 68 |
| Subtotal | 26 | Subtotal | 4513 |
| PERMIT 0297 AUCKLAND UNIVERSITY |  | PERMIT 0325 |  |
| NORTH ISLAND ROBIN | 53 | OSNZ AUCKLAND SEABIRD GROUP |  |
| SOUTH ISLAND ROBIN | 64 | NORTHERN BLUE PENGUIN | 36 |
| NORTH ISLAND SADDLEBACK | 221 | GREY-FACED PETREL | 504 |
| Subtotal | 338 | PYCROFT'S PETREL | 135 |
|  |  | BLACK PETREL | 21 |
| PERMIT 0298 WILSON K-J |  | FLESH-FOOTED SHEARWATER | 18 |
| KEA | 13 | SOOTY SHEARWATER | 39 |
| Subtotal | 13 | FLUTTERING SHEARWATER | 3 |
|  |  | NORTH ISLAND LITTLE (ALLIED) |  |
| PERMIT 0307 COSSEE R O |  | SHEARWATER | 102 |
| COOK STRAIT BLUE PENGUIN | 103 | NORTHERN DIVING PETREL | 27 |
| SPOTTED SHAG | 26 | Subtotal | 885 |
| REEF HERON | 1 |  |  |
| VARIABLE OYSTERCATCHER | 13 | PERMIT 0329 VICTORIA UNIVERSITY |  |
| BANDED DOTTEREL | 3 | NORTH ISLAND KAKA | 40 |
| SOUTHERN BLACK-BACKED GULL | - 903 | Subtotal | 40 |
| WHITE-FRONTED TERN | 12 |  |  |
| SILVEREYE Subtotal | 210 | PERMIT 0332 |  |
|  | 1271 | STILT RESEARCH GROUP OSN PIED STILT | 114 |
| PERMIT 0317 |  | Subtotal | 114 |
| BANDED DOTTEREL STUDY GROUP |  |  |  |
| BLACK-FRONTED DOTTEREL | 36 | PERMIT 0337 |  |
| Subtotal | 36 | ROYAL SPOONBILL PROJECT OSNZ |  |
|  |  | ROYAL SPOONBILL | 26 |
| PERMIT 0323 |  | Subtotal | 26 |
| DOWDING J (N Z DOTTEREL GRP) |  |  |  |
| NEW ZEALAND DOTTEREL | 109 | PERMIT 0338 |  |
| Subtotal | 109 | WELLINGTON CONSERVANCY DOC |  |
|  |  | SOOTY SHEARWATER | 110 |
| PERMIT 0324 |  | NOTORNIS | 7 |
| PASSERINE GROUP OSNZ CENTRAL |  | STITCHBIRD | 2 |
| SHINING CUCKOO |  | NORTH ISLAND SADDLEBACK | 1 |
| NEW ZEALAND KINGFISHER | 11 | Subtotal | 120 |


| Permit holder | Birds |  | Permit holder | Birds |
| :--- | ---: | :--- | ---: | :--- |
|  |  | Banded |  | Banded |
|  |  |  |  |  |


| Permit holder | Birds <br> Banded | Permit holder | Birds <br> Banded |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| PERMIT 3125 EASTERN REGION DOC |  |  |  |

## APPENDIX 1

## Research supported by bird banding during 1992/93

(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 the Nortem Royal Albatross, population dynamics, life span and dispersal patterns. (0005)

Life expectancy, breeding success, dispersal and census of Australasian Gannet on White Island. (0032)
Breeding biology and movements of Westland Black Petrel. (0036)
Distribution, life expectancy and migration of native and introduced Passerines. (0041, 0076, 0104, 0215, 0234, 0243, 0257, 0277, 0292, 0294, 0297, 0307, 0324, 0333, 0335, 0338, 0340, 0342, 0351, 0361, 3125, 9125)

A longterm study of population dynamics, behaviour and dispersal of White-flippered Penguins. (0042)
Ecology, dispersal and habitat requirements of White-fronted Terns and Black-billed Gulls. (0044)
Distribution, movements and longevity of Caspian Terns. (0053)
Population dynamics, longevity, age of first breeding, migration dispersal and movements of Procelariiformes. (0062, 0068, 0076, 0243, 0325, 0338, 0346, 0349)

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

Ecology and movements of South Island Kaka. (0104)
Black-backed Gull dispersal and population dynamics. (0042, 0076, 0104, 0256, 0291, 0307)
Translocation of South Island Robins from Breaksea Island, Fiordland. (0104)
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. (0172, 0174, 0179, 0345)

Population dynamics of South Island Paradise Shelduck. (0179)
Population dynamics of Canada geese. $(0164,0282,0345)$
Population dynamics and dispersal of Black Shag in the lower North Island. (0244)
Breeding biology and reproduction of the Chatham Island Pigeon. (0244)
Population dynamics and distribution of Fairy Terns in Northland. (0246)
Breeding biology of the Black-backed Gull in Nelson. (0256)
Population dynamics of North Island Weka in the wild and those of aviary bred stock released into the wild. (0259, 0275, 0363)

Population dynamics of Little Blue Penguins. (0042, 0266, 0307)
Population dynamics of South Island Rifleman in Kowhai BUsh, Kaikoura. (0277)
Migration patterns in waders. $(0278,7125)$
Population dynamics in North Island Canada Geese. (0282, 0345)
Biology and distribution of New Zealand Raptors. (0243, 0285, 0339, 0341)
Population dynamics of Black-backed Gull in Northland. (0291)
Ecology and dispersal of Fiordland Crested Penguins from Open Bay Island. (0295)
Population dynamics of North and South Island Robins. (0297)
Population biology and vocalisation of North Island Saddleback on Tiritiri Matangi Island. (0297)
Behaviour and population dynamics of Kea. (0298)
Population dynamics and ecology of the Yellow-eyed Penguin. (0108, 0301, 9125)
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 $(0325,9125)$
Movement patterns of the Pied Stilt. (0332)
Dispersal of Royal Spoonbills from Vernon Lagoons, Marlborough. (0337)
Relocation of Stitchbirds to Kapiti Island. (0338)
Population structure and dynamics of the Wandering Albatross on the Auckland Islands. (0346)
The importance of New Zealand wildlife as reservoir hosts for the disease Yersiniosis (0351)
Long term monitoring of New Zealand Shore Plover and Chatham Island Oystercatcher in the Chatham Islands. (7125)

Natal dispersal of Blue Duck. (0348, 4125, 9125)
Chick production estimates of Grey-faced Petrel on Whale Island. (9125)
Productivity and predation of Yellow-crowned Parakeet, Yellowhead and South Island Robin. (9125)
Distribution and ecology of the North Island Kaka. (0324, 9125)
Release of captive reared Takahe into the wild. (9125)
NOTE: Although some permit numbers in the above list do not appear in Table 4, these permits were
active, but banding data arrived too late to be included in this report.

