

THE OSTRICH

Vol. 46, No. 2

June 1975

SEVENTEENTH RINGING REPORT FOR SOUTHERN AFRICA

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Received March 1975

SUMMARY

VERNON, C. J. 1975. Seventeenth ringing report for southern African. *Ostrich* 46:125-128. A report on ringing activities in southern Africa from July 1973 to June 1974 is presented. A total of 51 561 birds of 451 species were ringed and are analysed according to distribution of ringers, groups of species and recovery rates. A list of those birds living longer than ten years is given. Analyses are needed of the most frequently ringed species in order to give greater purpose to future ringing.

INTRODUCTION

This report covers the period July 1973 to June 1974, when 51 561 birds of 451 species were ringed. This brings the total number of ringed birds in southern Africa to nearly 800 000 individuals of 714 species.

The report follows the 16th report (Elliott 1974) in not publishing lists of species ringed or recovered. This is due to the high cost of publishing such lists and the volume of work involved. Instead, this information is available to any person who requests it from the Ringing Unit.

The report focuses upon the state of ringing in southern Africa. As ringing is only a tool for helping to elucidate avian problems of demography, movements and population size, it is relevant to appraise ringing in this light.

DISTRIBUTION OF RINGING ACTIVITY

The majority of birds were ringed in either the Cape Province or the Transvaal (Table 1). The Witwatersrand Bird Club (9 700), Barberspan Nature Reserve (9 561) and the Cape Bird Club (8 252) were the principal ringing organizations.

TABLE 1
DISTRIBUTION OF RINGING ACTIVITY

Province or Country	Percentage
Cape	36,0
Natal	5,0
Orange Free State	1,2
Rhodesia	13,0
South West Africa	3,0
Transvaal	38,6
Others (Botswana, Malawi, Marion Island, Mauritius)	3,0
Total number of birds ringed: 51 561	

The ringing activity can be divided into three: professional ringing for conservation agencies, amateur ringing for specific projects, and amateur ringing with no immediate aim (Table 2). In order to obtain free rings, ringers have to register projects. Several ringers have joined together to form study groups and the Vulture, Raptor and Wader groups are particularly active.

TABLE 2
PERCENTAGE OF RINGING ACCORDING TO STATUS OF RINGER

Status	Percentage 1972/73	Percentage 1973/74
Professional	56	52
Projects	27	31
Non-projects	17	17

BIRDS RINGED

The most frequently ringed groups of birds are shown in Table 3. The majority of ringing effort is directed at relatively few species, while certain sections of the avifauna such as most insectivorous passerines are infrequently ringed. While this concentrated effort is laudable it should also be productive in terms of publications.

TABLE 3
TAXONOMIC GROUPINGS OF THE MAJORITY OF BIRDS RINGED IN 1973/74

Type	No. of species ringed	Total rings	% of overall ringed
Seabirds	13	2 304	4,5
Herons, Storks, Ibis	25	2 667	5,2
Ducks	14	3 933	7,6
Waders	40	7 253	14,1
Doves	11	9 332	18,1
Seedeating Passerines	71	15 613	30,1

The birds most frequently ringed are not necessarily those with the best recovery rates. Only four of the 12 most frequently ringed species have recovery rates greater than the overall mean of 1,1% (Table 4). The ducks are the only group in Table 3 which are recovered in any great numbers. This disparity is confirmed in Table 5 where seven ducks are amongst the 16 species with the highest recovery rates.

The most frequently ringed species, the Redbilled Quelea *Quelea quelea* and the European Swallow *Hirundo rustica* have very low recovery rates (Table 4). For certain species, low recovery rates have to be accepted if any findings are to be gained.

The value of retrap data has long been underestimated. The number of retrappings forming part of some intensive studies has been equal to the number of birds ringed (Table 4). This emphasizes that intensive ringing is more productive than extensive ringing.

RESULTS

There have been only seven papers dealing with ringing of birds in southern African in the past 15 years. All of these papers were prepared by professional ornithologists. This is in contrast to the fact that most of the ringing has been done by amateurs.

The only analysis made of the ringing data during 1973/74 was undertaken by two post-graduate students. An analysis made of the Cape Vulture longevity in 1972/73 was published during the reported year (Houston 1974).

The ringing scheme has been in progress for 25 years and this means that the data should be available for computing longevity of individual species. All those species whose greatest ringed life exceeds ten years are listed in Table 6.

TABLE 4
TWELVE MOST FREQUENTLY RINGED BIRDS IN 1973/74

Species	% of '73/74 ringing	Total ringed since 1950	Total recoveries	Recovery rate	Total retraps
Cattle Egret <i>Bubulcus ibis</i>	2,7	44 702	389	0,9	0
Yellowbilled Duck <i>Anas undulata</i>	3,2	43 409	731	1,7	28 970
Curlew Sandpiper <i>Calidris ferruginea</i>	6,2	11 577	62	0,5	220
Little Stint <i>Calidris minuta</i>	2,0	11 129	36	0,3	297
Hartland's Gull <i>Larus hartlaubii</i>	3,1	5 114	115	2,2	6
Turtle Dove <i>Streptopelia capicola</i>	2,0	8 413	110	1,3	10 795
Laughing Dove <i>Streptopelia senegalensis</i>	11,2	30 622	429	1,4	28 910
European Swallow <i>Hirundo rustica</i>	8,2	134 261	626	0,5	31
Cape Sparrow <i>Passer melanurus</i>	2,0	24 370	143	0,6	339
Masked Weaver <i>Ploceus velatus</i>	4,9	26 888	208	0,8	697
Redbilled Quelea <i>Quelea quelea</i>	7,0	77 049	176	0,2	131
Red Bishop <i>Euplectes orix</i>	4,1	20 391	82	0,4	950
Total for above species	29 036	437 925	3 007		71 346
Total for all species	51 561	798 426	8 653		121 251
Percentage	56,2	54,8	34,9		58,9

Overall percentage recovery rate for all birds ringed: 1,1%

TABLE 5
SPECIES WITH HIGHER RECOVERY RATES THAN THOSE LISTED IN TABLE 4

Species	% recovery rate
Whitebreasted Cormorant <i>Phalacrocorax carbo</i>	10,0
Bank Cormorant <i>P. neglectus</i>	3,3
Blackheaded Heron <i>Ardea melanocephala</i>	2,8
Goliath Heron <i>A. goliath</i>	10,0
Night Heron <i>Nycticorax nycticorax</i>	2,3
Spurwing Goose <i>Plectropterus gambensis</i>	6,5
Egyptian Goose <i>Alopochen aegyptiacus</i>	6,0
Knobnosed Goose <i>Sarkidiornis melanotos</i>	7,8
Shelduck <i>Tadorna cana</i>	3,7
Cape Teal <i>Anas capensis</i>	8,0
Redbilled Teal <i>A. erythrorhyncha</i>	3,5
Pochard <i>Netta erythrophthalma</i>	3,5
Redknobbed Coot <i>Fulica cristata</i>	3,3
Spotted Eagle Owl <i>Bubo africanus</i>	9,6
Olive Thrush <i>Turdus olivaceus</i>	2,3
European Starling <i>Sturnus vulgaris</i>	2,3

TABLE 6
SPECIES WHOSE RINGED LIFE IS TEN YEARS OR MORE

Species	Years
Wandering Albatross <i>Diomedea exulans</i>	12
Cape Gannet <i>Morus capensis</i>	16
Whitebreasted Cormorant <i>Phalacrocorax carbo</i>	11
Bank Cormorant <i>Phalacrocorax neglectus</i>	17
Darter <i>Anhinga anhinga</i>	12
Grey Heron <i>Ardea cinerea</i>	13
Blackheaded Heron <i>Ardea melanocephala</i>	12
Cattle Egret <i>Bubulcus ibis</i>	16
Night Heron <i>Nycticorax nycticorax</i>	10
Sacred Ibis <i>Threskiornis aethiopicus</i>	21
Spoonbill <i>Platalea alba</i>	11
Egyptian Goose <i>Alopochen aegyptiacus</i>	11
Shelduck <i>Tadorna cana</i>	10
Yellowbilled Duck <i>Anas undulata</i>	13
Redbilled Teal <i>Anas erythrorhyncha</i>	15
Cape Vulture <i>Gyps coprotheres</i>	13
Redknobbed Coot <i>Fulica cristata</i>	12
Blue Crane <i>Tetrapteryx paradisea</i>	13
Curlew Sandpiper <i>Calidris ferruginea</i>	11
Hartlaub's Gull <i>Larus hartlaubii</i>	11
Antarctic Tern <i>Sterna vittata</i>	20
Whitethroated Swallow <i>Hirundo albigularis</i>	10
Fiscal Shrike <i>Lanius collaris</i>	12
Boubou <i>Lanarius ferrugineus</i>	11
Whitebrowed Sparrow-weaver <i>Plocepasser mahali</i>	10
Masked Weaver <i>Ploceus velatus</i>	11
Redbilled Quelea <i>Quelea quelea</i>	10

CONCLUSIONS

There is no other ornithological activity in southern Africa which operates on so large a budget as bird ringing. This high cost should be justified by greater productivity of results. There is a great need to analyse the data collected, more especially to provide firm guidelines for future studies. It is presumed that the trend for amateurs to gather data and for professionals to make the analyses will persist. Consequently it is vital that there is co-operation between the two groups.

ACKNOWLEDGEMENTS

The National Zoological Gardens, Pretoria, received and forwarded recovery reports to the National Unit for Bird Ringing and are thanked for this vital service.

REFERENCES

- ELLIOTT, C. C. H. 1974. Sixteenth ringing report for southern Africa. *Ostrich* 45:161-166.
HOUSTON, D. C. 1974. Mortality of the Cape Vulture. *Ostrich* 45:57-62.

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