A BRIEF REPORT OF RINGING AT BARBERSPAN INCLUDING THE 1978/79 REPORT

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Bird Ringing has been the major research activity at Barberspan since its inception in 1955. Peter Milstein assumed duty in January 1968 and reorganised the ringing programme so successfully that in that year alone no less than 16 587 birds were ringed. This was only 7 617 less than all the birds ringed at Barberspan in the previous 13 years. This momentum was continued when I replaced Peter in January 1971 and up to December 1978 by which time 134 491 birds had been ringed.

Table 1 shows that 204 species were ringed. This includes two hybrids, Anas undulata x A. erythrorhyncha and A. undulata x Netta erythropthalma. It is clear that most species were ringed in small numbers. This became evident late in 1976 so it was decided to reduce ringing to the Anatidae and the Palaearctic waders. The reasoning was very obvious. Those species that are ringed in small numbers produce little or no results. Recoveries were practically non-existant and the numbers were too few to use for population or moult studies. Furthermore Barberspan is maintained by a conservation agency which is responsible for studying economic species like the ducks.

Table 1

Numbers and totals of species ringed at Bardsey, 1955-1978

	No.spp. ringed	% ringed	Total ringed	% Total ringed
Less than 100 individuals	163	80	[illegible]	[illegible]
Less than 1 000 individuals	26	13	8 285	6
More than 1 000 individuals	15	7	124 073	92
Total	204	100	134 491	100

TABLE 2

List of species where more than 1 000 individuals were ringed at Barberspan.

Species	total ringed	% of grand total ringed
Phalacrocorax lucidus	2 324	2
Ardeola ibis	1 091	1
Threskiornis aethiopicus	1 434	1
Tadorna cana	3 910	3
Anas undulata	46 398	34
Anas eryrhrorhyncha	7 542	6
Netta erythrophthalma	4 679	3
Fulica cristata	16 528	12
Calidris minuta	1 512	1
Streptopelia senegalensis	1 772	1
Hirundo spilodera	3 671	3
Passer melanurus	2 593	2
Ploceus velatus	5 365	4
Quelea quelea	21 233	16
Euplectes orix	4 021	3
Total	124 073	92

Year round ringing of the ducks was discontinued in 1977, being reduced to a three-month period viz. July-September. This is when most species on average, are ringed and when most juveniles are trapped.

Table 2 shows the totals of the species where more than 1 000 were ringed. The yellow-billed Duck Anas undulata total amounted to 34% of all birds ringed. This species also produced most recoveries. The recoveries that we continue to receive fit the already established pattern of most from the Highveld region of South Africa. It is probably safe to say that no more need be ringed if the prime aim was to assemble data on recovery distribution.

Although 21 233 Red-billed Queleas Quelea quelea were ringed only 48 recoveries of any significance were received. This is a recovery rate of 0,2%.

All retrapped birds were recorded from 1968 which is a massive accumulation of data. Most of the recaptures were within a few days of initial ringing so have little biological significance. The uneven numbers ringed and recaptured each month, even for a species like the Yellow-billed Duck, tend to distort any attempt to work out population parameters.

All the waterfowl data have been computerized and once the snags have been ironed out the survival rates will be available. This is likely to be the most important part of the ringing study.

TABLE 3

Species and totals ringed in 1978/79 at Barberspan.

Species	Total
Tadorna cana	6
Anas smithii	1
Anas undulata	763
Anas erythrorhyncha	428
Netta erythrophthalma	5
A. undulata x N. erythrophthalma	2
Porphyrio porphyrio	4
Gallinula chloropus	1
Fulica cristata	115
Charadrius pecuarius	15
Charadrius tricollaris	2
Calidris ferrunginea	13
Calidris minuta	159
Tringa terek	1
Tringa glareola	2
Total	1 517

One important reason for reducing the time spent ringing is that we are at the stage where the ringing results cannot be properly interpreted in terms of the general ecology of each species. Why do most Yellow-billed Ducks move in a different direction and for shorter distances than the Southern Pochard Netta erythrophthalma? Many other questions can be asked so I opted to get more involved in basic ecological studies of the ducks starting with the Yellowbill. Detailed studies involving ringing can and should be undertaken to determine the home ranges and habitat selection of breeding females either by colour marking or radio telemetry.

Table 3 lists the numbers and totals of species ringed in the 1978/79 ringing season. The ducks, coot, Purple Gallinule Porphyrio porphyrio, and Moorhen Gallinula chloropus were ringed in the July-September period. The waders were ringed in November and December. Barberspan does not support large wader populations as in the southwestern Cape so trapping them is rather a minor activity.