SAFRING ringing totals over 50 years

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In 1998 SAFRING celebrated its 50th anniversary. Although the first ringing took place in 1948, totals were insignificant until 1950, so that 1974 marks the effective midpoint of the ringing era in southern Africa. The total number of birds which had been ringed by July 1999 was 1.8 million, of which 45% were ringed in the period up to 1974, and 55% subsequently (Table 1). At current levels of ringing activity, the two millionth bird will be ringed during the 2001–2002 ringing year. Incidentally, the number of these birds which had been recovered up to July 1999 was 15 477, one bird in every 115 ringed. However, at least 1000 birds that currently bear rings will ultimately be recovered, so that the overall recovery rate at SAFRING hovers close to 1%.

The most ringed bird with SAFRING rings remains the European Swallow, with more than 200 000 ringed (Table 1). 64% were ringed in the first 25-year period. There is currently a strong focus on swallow ringing in Europe, motivated by decreases in numbers of this icon of migration. SAFRING ringers can help by ringing this species while they are in southern Africa. The likelihood of retrapping a foreign ringed swallow has never been higher.

The list of the top 20 species ringed over 50 years includes seven granivores, three seabirds, three waterbirds, and three Pale-

Table 1. Top 20 species ringed in southern Africa over 50 years, 1950–1999.

	Species	Scientific	Total ringed	1950–1974	% first
	All species		1787 475	796 958	45
493	European Swallow	*Hirundo rustica*	210 236	134 261	64
805	Redbilled Quelea	*Quelea quelea*	152 594	77 045	50
044	Cape Gannet	*Morus capensis*	129 666	44 311	34
803	Masked Weaver	*Ploceus velatus*	80 305	26 888	33
808	Red Bishop	*Euplectes orix*	74 137	20 391	28
096	Yellowbilled Duck	*Anas undulata*	58 548	43 409	74
002	African Penguin	*Spheniscus demersus*	51 935	8 216	16
317	Laughing Dove	*Streptopelia senegalensis*	48 656	30 622	63
061	Cattle Egret	*Bubulcus ibis*	46 198	44 702	97
786	Cape Sparrow	*Passer melanurus*	44 894	27 367	61
504	South African Cliff Swallow	*Hirundo spilodera*	43 261	18 403	43
775	Cape White-eye	*Zosterops pallidus*	42 083	6 336	15
799	Cape Weaver	*Ploceus capensis*	30 201	7 437	25
251	Curlew Sandpiper	*Calidris ferruginea*	26 299	11 577	44
212	Redknobbed Coot	*Fulica cristata*	26 092	21 663	83
298	Swift Tern	*Sterna bergii*	20 009	310	2
253	Little Stint	*Calidris minuta*	17 379	11 129	64
545	Blackeyed Bulbul	*Pycnonotus barbatus*	16 538	5 203	31
823	Bronze Mannikin	*Spermestes cucullatus*	15 794	7 343	46
784	House Sparrow	*Passer domesticus*	15 513	7 676	49

arctic migrants, European Swallow, Curlew Sandpiper and Little Stint (Table 1). An introduced species, House Sparrow, makes it onto the list in 20th place. A striking feature of the list in Table 1 is the rate at which the totals decrease. By the 20th species on the list, a mere 15 500 have been ringed.

The ringing totals per species per year are readily available from 1975 onwards, the year in which SAFRING was computerised. Prior to this the numbers of each species ringed per year are listed in the annual ringing reports but these have not been computerised. So the totals ringed per species from the start of ringing until 1974 are most easily calculated by subtraction.

It is striking that in the period up to 1974 the emphasis was on waterbird ringing. Thus 97% of all ringed Cattle Egrets were ringed in this first period (Table 1). Similarly 74% of Yellowbilled Ducks and 83% of Red-knobbed Coots were ringed in the same period. This reflects the efforts of ringers working at Barberspan and Rondevlei, ringing chicks of egrets and trapping adult waterfowl in walk-in traps. Unfortunately, most of the people who were ringing during this period have either retired or died, and there is an acute lack of skills in using these techniques. A large amount of dam construction has taken place since 1974, and it is likely that the patterns of movements of waterbirds have changed. There is great value in starting to address this imbalance during the next few years, and rekindle an interest and skills in waterbird ringing.

During the second period, 1975–1999, the overwhelming majority of ringers focused on mistnetting. This is clear from Table 1, because the species with large proportions ringed during the second period are mostly small to medium-sized passerines, the species that most easily get caught in mistnets. Thus 15% of Cape White-eyes were ringed in the first period and 85% in the second. Similarly, 75% of Cape Weavers and 72% of Red Bishops were ringed in the second period.

Most seabird ringing has taken place in the later period (Table 1). Given the ease with which chicks can be ringed, it is perhaps surprising that only 2% of Swift Tern ringing was in the first period. Flipper bands for penguins were developed in the early 1970s, so most (84%) of African Penguin flipper bands

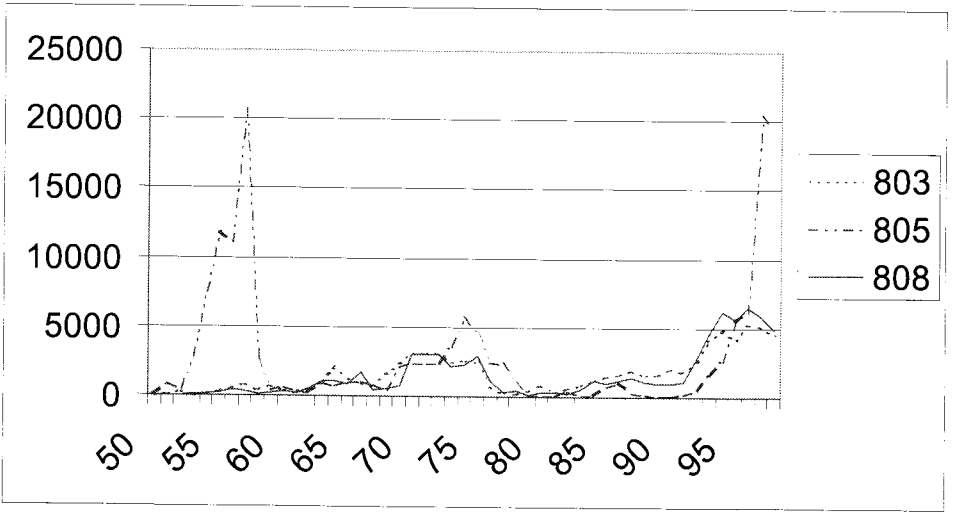

Fig. 1. Annual ringing totals for Masked Weaver (803), Redbilled Quelea (805) and Red Bishop (808).

date from the second period. The fact that Cape Gannet ringing has been well spread out through time, with 34% being done during the first period, means that there is a good opportunity to look at changes in movement patterns through time.

The annual totals for the three granivores, Redbilled Quelea, Masked Weaver and Red Bishop, near the top of Table 1 were computerised from 1950 to 1974 using the information published in the annual ringing reports and these totals plotted (Fig. 1). The Redbilled Quelea has equal numbers ringed in the first and second periods. Fig. 1 clearly shows how it was ringed intensively from 1955 to 1960 and again from 1996 to 1998. The Masked Weaver and Red Bishop show a fairly consistent increase over the decades, although there was a large dip in the late 1970s.

The take-home message from Table 1 is that there is no species in southern Africa for which we have 'enough' data. The rate at which species ringing totals (and therefore also recoveries) decreases down Table 1 is alarming. At the top of the list, the European Swallow has become a conservation concern, possibly due to global climate change, and the fact that there is a large body of existing data provides an opportunity to make comparisons. Waterbird ringing needs to be re-established to find out whether the migration patterns from three decades ago still hold good.

We encourage all ringers to keep contributing to the overall SAFRING project. On average, every 100 birds ringed generates a recovery which forms part of the jigsaw of understanding survival and movement. These are two crucial components of effective conservation planning, and they are most readily available as a result of bird ringing.

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Notice

Ringing Programme of Migratory Passerines in Doñana National Park, Spain

Dear Bird Ringers

The Estacíon Biológica de Doñana organises an ongoing Ringing Programme of Migratory Passerines in the National Park of Doñana during the postnuptial migration.

In order to keep this research project running, we need the help of expert ringers and assistants.

The ringing period usually runs from 1st September to 7th November, and the minimum stay for participants is one week.

Interested persons can find the application form and more information at our web site:

http://www.ebd.csic.es./ringing/

or contact us via :

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I hope to hear from you soon.

Kind regards

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