THIRTEEN YEARS OF RINGING SWIFTS

John Bunning

It was with great interest that I read R.K. Schmidt's article on 25 years of ringing Whiterumped Swifts *Apus caffer* (Safring News 15: 3-10). I would like to add my own findings having ringed good numbers of swifts at the Melville Koppies Reserve, Emmarentia, Johannesburg (26°10S, 28°00E) over the last 13 years.

The Melville Koppies Reserve comprises mainly rocky grassland dotted with small *Protea caffra* bushes and an area of thick *Acacia robusta* bush above which is a bare plateau (Bunning, 1977. Southern Birds 3.). There are numerous termitaria in the Reserve, and in the early summer when the termites embark on their nuptial flights swifts and swallows congregate in large numbers to feed on them. In the early days of ringing at the Reserve I erected mistnets over, or by, these termitaria. The largest number of swifts caught this way in a single flight was 98. The number caught by this method, however, soon dwindled. At the suggestion of some of my trainees we started 'flick-netting' for swifts. This method entailed two people holding a mistnet stretched between two bamboo poles and held parallel to the ground in the flight-path of the swifts. At the approach of a swift the poles and net were flicked into a vertical position. A third person extracted any swift(s) caught. The whole procedure was repeated until the swift feeding-flight finished or moved. The largest number of swifts caught by this method during one such flight was 83. The number of swifts ringed since August 1973 is given in Table 1.

TABLE 1

SPECIES AND NUMBERS OF SWIFTS RINGED AT MELVILLE KOPPIES RESERVE SINCE AUGUST 1973

SPECIES		TOTAL
Horus Swift	*Apus horus*	1
European Swift	*Apus apus*	4
African Palm Swift	*Cypsiurus parvus*	18
Little Swift	*Apus affinis*	367
Whiterumped Swift	*Apus caffer*	923
TOTAL		1 313

Although hundreds of swifts had been ringed at the Reserve, no retraps were made prior to the introduction of flick-netting. This may indicate that swifts, having once been mistnetted, quickly learn to avoid the nets. The average elapsed time from ringing of seven retraps of Whiterumped Swifts is 51 months; the oldest retrap was caught 91 months and 24 days after being ringed.

Table 2 (opposite) gives the measurements of five species of swift caught at Melville Koppies. Wing formulae were taken from a sample of birds (Table 3 page 12). Wing formulae may be useful in separating the near-identical European Swift and Black Swifts *A. barbatus* but we were unable to test this. The wing measurements of the four European Swifts caught (161-170 mm) fall within the range of the race *A. a. pekinensis*.

I wonder how many times people have heard or read that once a swift is grounded it is unable to take off again? To investigate this phenomenon we conducted an experiment with some of the swifts we netted. After ringing the birds were placed on the ground and watched to see if they could become airborne. Five of 156 Whiterumped Swifts could not take off from ground level, and one only managed to get airborne with difficulty. Five of 56 Little Swifts could not take off from the ground, and two could only just manage. All 10 birds flew off successfully when hand-supported above the ground. Three African Palm Swifts had no difficulty in taking off from the ground. It appeared that birds released almost at dusk experienced difficulty in taking off. Perhaps these were heavy with termites? The weights of these birds did not, however, differ from those of birds caught at other times of day. It also appeared that the birds needed a clear launching-pad from which to take off. Any obstruction, such as vegetation, prevented take-off and the birds had to be relocated in a clear area from which they could take flight.

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TABLE 2

MEASUREMENTS (MINIMUM - MEAN - MAXIMUM) OF FIVE SPECIES OF SWIFT FROM MELVILLE KOPPIES RESERVE

	EUROPEAN SWIFT *Apus apus*	HORUS SWIFT *Apus horus*	AFRICAN PALM SWIFT *Cypsiurus parvus*	LITTLE SWIFT *Apus affinis*	WHITERUMPED SWIFT *Apus caffer*
FULL LENGTH (mm)	170-172-173	144-148-152	140-164-174	120-131-140	150-159-181
WING LENGTH (mm)	164-169-173	152-155-158	132-135-136	128-133-146	138-148-155
TAIL (mm)					
Longest	73-75-76	53-58-63	76-97-105	40-45-50	70-73-81
Shortest	45-47-48	41-44-47	34-39-44	----	40-46-56
TARSUS (mm)	-----	------	8-9-11	8-9,5-10	9-9,5-10
CULMEN (mm)	_____	------	5-6-8	5-6-7	5-5,5-7
MASS (g)	28-30-32	28-29,5-32	14-16-18	23-28-34	21-26-30

TABLE 3

WING FORMULAE OF THREE SPECIES OF SWIFT FROM MELVILLE KOPPIES

(Figures represent minimum-mean-maximum mm by which the primary is shorter than the wing point. No emarginations or notches were found on the primaries of any of the three species)

	WHITERUMPED SWIFT* *Apus caffer*	LITTLE SWIFT** *Apus affinis*	AFRICAN PALM SWIFT*** *Cypsiurus parvus*
PRIMARY 1	1-4-6	wing point or 1-2,5-4	4-7-9
PRIMARY 2	wing point	wing point or 1-1,5-2	wing point
PRIMARY 3	4-7-10	4-5-9	4-6-8
PRIMARY 4	17-20-25	14-17-23	14-19-21
PRIMARY 5	32-35-41	25-28-36	32-34,5-37
PRIMARY 6	40-49-55	37-41-47	44-49,5-55
PRIMARY 7	56-62-68	49-54-69	58-62-67
PRIMARY 8	70-75-87	58-65-79	69-75-81

* 18 Adult, unsexed individuals.

** 9 Adult, unsexed individuals.

*** 6 Adult, unsexed individuals.