

## Greatest longevity record for Gurney's Sunbird *Promerops gurneyi*

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During a mark-recapture study on Gurney's Sugarbirds *Promerops gurneyi* in Lydenburg, Mpumalanga Province, de Swardt & Peach (2001) analyzed the recapture data of this species based on a long term study on their seasonal movements (de Swardt 1991). The greatest elapsed times recorded were of two individuals after 88 months and this species was considered to survive beyond seven years of age (de Swardt & Peach 2001). De Swardt & Peach (2001) further discussed their high survival rate of 80.7%, which compared well with other southern African passerine species where birds survived for more than eight years (Hanmer 1987).

The Lydenburg study areas have already been described by de Swardt (1991 & 1998) where the mountainous areas are dominated with *Protea roupelliae* woodland at altitudes above 1800 metres while *Aloe arborescens* and other foodplants are an attraction for sugarbirds during winter months. Since 1998 the study areas were again visited, with the aim to obtain seasonal movement data during the winter months. On 11 June 2004 a ringed adult male sugarbird (with ring number 4-80688) was removed from a high mist net between two large flowering *A. arborescens* plants at the Lydenburg Fisheries outside Lydenburg. As the sugarbirds were mostly ringed with 3.5 Aluminium Alloy (CC) rings, the 4.3 Incoloy (4) ring was unfamiliar to me. The sugarbird was examined and measurements of tail (165.0 mm),

wing (96.0 mm), culmen (27.5 mm), total head length (53.5 mm) and width of bulging primary 6 (14.6 mm) were taken. The sugarbird recapture was reported to SAFRING. The sugarbird was ringed by Kotie Herholdt as an unsexed individual on 16 June 1994 at the same locality. As sugarbirds reach adulthood in their second or third year, and ringed as unsexed sugarbird, its estimated age will be at least 12 years (de Swardt 1998). This record represents the greatest time elapse of 120 months for Gurney's Sugarbird. As this sugarbird is one of several which move seasonally between the mountainous localities around Lydenburg, several questions can be asked of their whereabouts during the summer months. Since this study was initiated in 1987, more than 630 sugarbirds were ringed in the Lydenburg area and to date 102 recaptures have been obtained (recapture rate of 16.2%). Of these 38 sugarbirds were already recaptured after a time lapse of longer than 24 months.

The oldest Cape Sugarbird *P. cafer* longevity record is 146 months (SAFRING unpublished data), two years longer than the Gurneys Sugarbird reported above. Other interesting longevity records were also observed in sunbird species. Recently, two Malachite Sunbirds *Nectarinia famosa* were obtained after a period of 120 months outside Bloemfontein and near Ficksburg in the eastern Free State and both were a few days younger than the one which was ringed in the southwestern

## Summary of recapture and recovery data for Gurneys' Sunbird

Years	Retraps	Recoveries
9+	1	0
8	0	0
7	2	0
6	4	0
5	5	3
4	4	2
3	5	0
2	6	0
1	30	2
0	25	7

Cape (Oschadleus & de Swardt 2003; unpubl. data). Similarly, the oldest Greater Double-collared Sunbird *N. afra* is 89 months and a Black Sunbird *N. amethystina* 100 months (Oschadleus 2000).

It was concluded that the high survival rates obtained in Gurney's Sugarbirds and Starred Robins *Pogonocichla stellata* were similar in species which have small clutch sizes and reflects the life history trade-offs between fecundity and survival (Oatley 1982). As an average sugarbird can survive for at least five breeding seasons, it is more costly to raise fewer young per breeding season, minimizing the cost of reproduction and maximizing the chances for survival later in the breeding season (de Swardt & Peach 2001). The recapture of the ten year old sugarbird and also other passerine species supports this assumption. Ringers are encouraged to target their ringing sites, as the longer ringing is carried out, the better the chances to obtain longevity data (Steven Piper, pers. comm). It became clear from recapture data such as this, that many passerine species in southern Africa are extremely long-lived.

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