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## LONGEVITY RECORDS OF SOUTHERN AFRICAN WEAVERS

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#### **AFRING NEWS PAPER**

# LONGEVITY RECORDS OF SOUTHERN AFRICAN WEAVERS

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#### **Summary**

This paper presents longevity records for all southern African weavers, based on the SAFRING database, as in August 2016. The greatest elapsed time for a southern Africa weaver is 15 years 4 months 15 days for a Southern Masked Weaver *Ploceus velatus*. Twelve southern African weaver species have longevity records over 10 years. The rest of the weaver species can be expected to achieve recorded longevities of more than 10 years with sufficient ringing effort.

#### Introduction

Longevity records are important in studying senescence, or biological aging (Wasser & Sherman 2010). Survival rates are important for understanding bird populations, but these rates are more difficult to obtain than longevity records (Wasser & Sherman 2010). Also, longevity records are fascinating and of great interest to the general public. High longevities may suggest high survival rates, and relative longevities and survival rates of birds are correlated (Møller 2006).

#### **Methods**

The SAFRING database was searched for longevity records for each weaver species in southern Africa. These records were checked against the original records as far as possible. The number of ringed, recaptured and recovered weavers was extracted on 7 August 2016 (Appendix 1). Longevity records are expressed as elapsed time between ringing and reporting, in years, months and days.

The records are compared with published records where relevant, and also with longevity records in captivity are listed in the Discussion.

The Olive-headed Weaver *Ploceus olivaceiceps* is omitted from this paper because only one has been ringed with a SAFRING ring (BC15829, in Malawi), and it has not been recaptured nor has the ring been recovered.

#### Conventions

Throughout this paper the longevity results are presented in abbreviated form, i.e. 15y 4m 15d for 15 years 4 months 15 days. Scientific names are provided in Appendix 1.

This paper provides records of the maximum value of the **minimum longevity** (the elapsed time between ringing and last recapture or recovery of the ring) rather than **estimated longevity**, for which one or two years are added to a minimum longevity to account for the presumed age of the bird when it was ringed. Estimated longevities are not presented here for the following reasons:

- Many weavers are difficult to age and sex (Craig 1982) (and sometimes even to identify!), with the time of year and observer skill being factors.
- The age of reaching final adult plumage has not been determined for most weavers, although in some species it



- appears to be two years for males and one year for some unknown proportion of females.
- It is easy to add years to obtain estimated longevities from minimum longevities, but when estimated longevities are published, it is not always clear how many years have been added.

#### Results and species discussions

Details of longevity records are listed below for each southern African weaver species. Each species lists the longevity and ring number with the species name in the header. This is followed by a table with some details for the ringing and final report of the holder of the longevity record: date, age, sex, mass and wing (if available), as listed in the SAFRING database. The total number of birds which were caught in the ringing session, and the number of weavers caught of the species under consideration, are listed. Sometimes other species that were caught at the same time as ringing or recapture of record-holders, are given for interest.

Here is an example of the layout, based on the first species listed below. For the Red-billed Buffalo-Weaver, seven birds were caught on 15 February 2004, which included two buffalo-weavers, one of which was ringed as 5H17931. On 21 February 2008 only two birds were caught, both buffalo-weavers, one of which was the bird with this ring 5H17931. Age and Sex are the standard SAFRING codes (de Beer et al. 2000). For Age, the codes are 0=unknown (or not recorded), 1=chick in nest, 2=juvenile, 3=immature and 4= adult. For Sex, the codes are 0=unknown (or not recorded), 1=male, 2=female, 3= possibly male and 4=possibly female. In the tables, the masses are in grams, so this bird had a mass of 84 g on first capture and 87 g when recaptured on 21 February 2008. The wing-length (mm) was recorded as 122 mm on ringing and as 120 mm on recapture. These numbers provide context and show that a longevity record may come when few

birds are caught as in the case of the buffalo-weaver, or as part of a large catch of birds.

A lot more information is provided on the weaver website at <a href="http://weavers.adu.org.za/wow\_age.php">http://weavers.adu.org.za/wow\_age.php</a>. Here there are links to maps showing ringing and reporting sites, and large amount of other detail is available.

#### Red-billed Buffalo-Weaver – 4y 0m 7d (5H17931)

	Ringing	Recapture
Date	15/02/2004	21/02/2008
Age	4	4
Sex	1	1
Mass	84	87
Wing	122	120
Birds	7	2
RbBW	2	2

This bird, with ring 5H17931, was ringed and recaptured by Dirk Heinrich at Wiese farm house, Namibia. When ringed, Dirk also caught two doves, two sparrows and a bunting.

Overall, 27 buffalo-weavers have been ringed at Wiese farm and seven recaptured. Ringing has taken place at Wiese every year since 2002, and more than 11,000 birds ringed on the farm. It is surprising that there is not a greater longevity record for this species. Possibly, the buffalo-weavers avoid being recaptured to some extent, and it is also possible that they are nomadic and move away.



#### White-browed Sparrow-Weaver – 11y 3m 22d (BC96612)

	Ringing	Recapture
Date	26/03/2000	14/07/2011
Age	4	4
Sex	0	4
Mass	41	37.9
Wing		99
Birds	18	23
WbSW	5	7

This bird, probably a female, was ringed by Bernd Brell at Auab Lodge, Namibia. It was recaptured by Jim Mcluskie who visited Auab Lodge on 13–14 July 2011.

The previous longevity record for the White-browed Sparrow-Weaver came from South Africa. Large numbers of birds were ringed at Barberspan in the 1960s and 1970s (Skead 1979) and resulted in a longevity record for this weaver of 10 years (ring 50205781, Milstein 1975). Even though it is relatively easy to catch this species, and these weavers do not move much, it took many decades before this long-standing Barberspan longevity record was broken. Interestingly, the new record came from a remote area in Namibia.

#### **Sociable Weaver – 15y 3m 9d (BC42438)**

	Ringing	Recapture
Date	29/04/1995	02/08/2010
Age	4	4
Sex	0	0
Birds	62	69
SocW	62	69

This weaver was ringed as an adult by Mark Anderson and his team at Benfontein Game Reserve, near Kimberley, Northern Cape, South Africa. It was retrapped four times, the last time by Rita Covas at the same farm (Covas 2012, Oschadleus 2012). Covas (2012) gave the longevity as 16 years, meaning the *estimated* longevity.

This population provided data for a long-term survival analysis (Covas et al. 2004). These authors noted that in contrast to most passerines, juveniles and adult Sociable Weavers had similar survival probabilities. Relatively high survival rates in Sociable Weavers probably result from a benign climate and easy access to food in winter. Juvenile survival may also be enhanced by prolonged parental care and delayed dispersal.

#### Scaly-feathered Finch – 5y 1m 21d (GA28835)

	Ringing	Recapture
Date	02/03/2002	21/04/2007
Age	4	4
Sex	0	0
Mass	12.5	12
Wing	58	57
Birds	71	59
SfF	1	4

Carel Kilian ringed and retrapped this adult bird at Polokwane Game Reserve (previously Pietersburg Nature Reserve), Limpopo Province.



#### Dark-backed Weaver – 5y 2m 28d (BH34002)

	Ringing	Recapture
Date	11/10/2004	06/01/2010
Age	4	4
Sex	0	2
Mass	35.5	33.7
Wing	87	87
Birds	66	7
DbW	2	2

In October 2004 Peter Nupen and Mike Ford visited Landela (Cloughside farm), between Port Elizabeth and Uitenhage, Eastern Cape. On 11 October they ringed 66 birds, including two Dark-backed Weavers. Adult BH34001 was recaptured one year and one month later at the same farm by Dieter Oschadleus, but not again after that. Adult BH34002, a female first ringed by Mike Ford on 11 October 2004, was recaptured twice. Dieter recaptured it on 16 November 2005 during a SAFRING national ringing workshop at Landela. Female BH34002 was caught again, this time with a juvenile (and five other non-weavers), on 6 January 2010 on a one-day visit to the farm, thanks to the hospitality of the owners Eugene & Renee Cooney. Another visit on 13-14 March 2012 produced 23 birds in the nets, including one unringed Dark-backed Weaver, but hopes of increasing the longevity record for this weaver by another year were not realized!

The Dark-backed Weaver may be expected to achieve much higher longevities, as relatively few have been ringed in Africa to date.

There is a published record of 5.5 years for an adult ringed in Zimbabwe (Hanmer 2009). This is an *estimated* longevity, however. The only record this could refer to, is ring BB04044, ringed and retrapped by Cecilia and Alex Manson at Seldomseen, Vumba,

Zimbabwe, with an elapsed time 3y 5m 7d, which has since been superseded.

#### Spectacled Weaver - 12y 5m 12d (BB38355)

	Ringing	Recapture
Date	07/11/1982	15/04/1995
Age	4	4
Sex	2	2
Mass	30	
Birds	17	71
SpW	3	2

On 7 November 1982 Dave Johnson ringed 17 birds at Darvill Sewage Works, Pietermaritzburg, including three Spectacled Weavers (an adult male and two adult females). Female BB38356 was not recaptured in subsequent ringing sessions. Male BB38354 was recaptured three times at Darvill, the last time being on 3 January 1988. Female BB38355 was recaptured three times at Darvill by Dave and his team of helpers, the last time being on 15 April 1995 when 71 birds were caught, mostly Southern Red Bishops but also two Spectacled Weaver recaptures.

Hanmer (2009) gave an *estimated* longevity record of 13.5+ y for the Spectacled Weaver in Zimbabwe. Taking off two years gives an elapsed time of 11.5 y which is less than the current record of 12y 7m 12d. But Dale's record was not found in the SAFRING database.



#### Lesser Masked Weaver -- 9y 0m 12d (AE94754)

	Ringing	Recapture
Date	08/05/2004	18/05/2013
Age	4	4
Sex	0	1
Mass	23	21.1
Wing	72	74
Birds	43	94
LMW	3	33

On 8 May 2004 Rynhard Kok caught 43 birds at Thulasihleka Pan in Richards Bay, KwaZulu-Natal. These were mostly Village Weavers but also three adult Lesser Masked Weavers, probably not in breeding plumage, because the sex was recorded as unknown. On 18 May 2013 Dieter Oschadleus ringed at the pan and caught 94 birds, with



**Figure 1.** Lesser Masked Weaver, with ring AE94754. This individual bird is the current longevity record holder. It is also interesting in being a male in breeding plumage in winter (May).

help from Alan van Zyl, Tina Lickford, and Dieter's nephew Daniel Oschadleus. The catch included 33 Lesser Masked Weavers; one was a recapture of AE94754. Surprisingly this bird was a male in full breeding plumage, even though it was winter (Figure 1). On 18 and 22 May ringers caught at this site produced 45 Lesser Masked Weavers. This one was in non-breeding plumage (see <a href="http://weavers.adu.org.za/newstable.php?id=374">http://weavers.adu.org.za/newstable.php?id=374</a> for more information).

The previous record for the Masked Weaver was 8y 9m 27d (ring AA40221).

#### Red-headed Weaver – 9y 1m 18d (BC07566)

	Ringing	Recapture
Date	26/10/1991	10/12/2000
Age	4	0
Sex	2	0
Mass	19.7	
Birds	10	7
RhW	1	1

This bird was ringed and retrapped by Dale Hanmer at Mitsasa, Mutare district, Zimbabwe. The initial catch included five Village Weavers and some other passerines. On the recapture date, only one weaver was caught, in addition to a Cardinal Woodpecker, two Brownhooded Kingfishers and some passerines.

Hanmer (2009) gave an *estimated* longevity record of 11+ y for the Red-headed Weaver in Zimbabwe, meaning the elapsed time was 9y, matching the record for ring BC07566.



#### Chestnut Weaver – 3y 3m 2d (BH15335)

	Ringing	Recapture
Date	25/01/2004	26/04/2007
Age	4	0
Sex	1	0
Mass	39	
Wing	82	
Birds	36	
ChW	36	

On 25 January 2004 Dirk Heinrich ringed Chestnut Weavers at two colonies north of Windhoek, Namibia. At Okapuka farm, he ringed 36 Chestnut Weavers, of which nine were males and 27 were females. One of these adult males (ring BH15335) was shot, while the bird was raiding or visiting a pearl-millet field, on 26 April 2007 at Onesi village, Ongandjera district. The elapsed time of the longevity record was a mere 3y 3m 2d. Chestnut Weavers should easily reach 10 years in age and more, but because they are so nomadic it may be difficult to obtain a longevity record of over 10 years.

In this particular recovery record (BH15335), the minimum distance moved was 580 km (Oschadleus 2011), being the greatest distance for this species based on ringing records. Thus weaver BH15335 currently provides the greatest longevity (small as it is) and the greatest distance moved!

Village Weaver - 13y 11m 15d (CC05299)

	Ringing	Recapture
Date	08/08/1992	16/07/2006
Age	4	4
Sex	1	1
Mass	45	46
Wing	92	
Birds	29	11
VW	27	4

On 8 August 1992 Meyrick Bowker ringed 29 birds in his garden in Pietermaritzburg, KwaZulu-Natal, 27 of which were Village Weavers. Adult male CC05299 was recaptured twice in the same garden, on 7 September 2003 and on 16 July 2006. On the latter date Meyrick caught 11 birds, with four Village Weavers, providing the greatest longevity for the species.

Craig (1982) listed a Village Weaver recapture of 14y 2m – it is not clear if this is the elapsed time or estimated longevity. Nevertheless, this record was not found in the SAFRING database. The record of 13y 11m 10d is a more recent record, made in 2006.



#### Cape Weaver - 13y 7m 28d (BB74847)

	Ringing	Recapture
Date	17/09/1995	09/05/2009
Age	4	4
Sex	1	1
Mass	47.5	47.5
Wing		91.5
Birds	16	13
CaW	14	3

On 17 September 1995 Adrian Craig ringed birds in his garden in Florence Street, Grahamstown, Eastern Cape, ringing 14 Cape Weavers (eight males and six females) and two Laughing Doves. Only one of these 16 birds was recaptured subsequently, namely Cape Weaver BB74847. On 9 May 2009 Adrian was ringing in the same garden (as on many previous occasions) and caught 13 birds of a wide variety of species. Three Cape Weavers were caught including one recapture. This bird had been ringed as an adult male in breeding plumage. The mass of the weaver was identical on recapture as at ringing.

The previous longevity record for the Cape Weaver was 10y 4m 1d (ring CC12898).

#### Yellow Weaver - 12y 0m 3d (BH12812)

	Ringing	Recapture
Date	07/12/2002	07/12/2014
Age	4	4
Sex	1	1
Mass	35	34
Wing	76	82
Birds	41	22
YW	17	4

On 7 December 2002 Andrew and Ivan Pickles ringed at Umzumbe River Floodplain on the South Coast, KwaZulu-Natal. They caught 41 birds, including 17 Yellow Weavers (three males, 13 females, and an immature). On 7 December 2014, coincidentally on the same day and month, Andrew was ringing again at the same site and caught 22 birds including four Yellow Weavers (three unringed and one recapture). Bird BH12812, an adult male, had a longevity of exactly 12 years.

The previous record was of a female at 8y 5m (ring BH19329) also at Umzumbe.



#### Golden Weaver -- 10y 6m 27d (4A02074)

	Ringing	Recapture
Date	16/11/1996	09/06/2007
Age	4	4
Sex	1	0
Mass	43	41
Wing		91
Birds	91	56
GW	1	2

On 16 November 1996 Dave Johnson ringed 91 birds at Darvill Sewage Works, Pietermaritzburg, KwaZulu-Natal, including one Golden Weaver (ring 4A02074). This bird was recaptured twice at the same site, on 10 April 1999 (by Dave) and 9 June 2007. On the latter date James Wakelin ringed at Darvill, and caught 56 birds, including two Golden Weavers, a new bird and the recapture that provided the greatest longevity for the species.

#### Southern Brown-throated Weaver – 12y 5m 22d (AA41145)

	Ringing	Recapture
Date	30/09/1975	17/03/1988
Age	5	0
Sex	2	0
Birds	2	4
SBtW	2	1

This bird was ringed and retrapped twice by Dale Hanmer at Nchalo sugar estate, Malawi. Dale undertook a long-term ringing study of this species in Malawi (Hanmer 1984), which led to many longevity records.

Hanmer (1987) listed many retraps from 8–12.5y, with ring number, the oldest being bird with ring 293245 with a 12.5y *estimated* longevity, and elapsed time 10y 7m 24d.

Hanmer (1989) gave an *estimated* longevity record of 13y for the Southern Brown-throated Weaver in Malawi, meaning the elapsed time was 12y for the juvenile, matching the record for ring AA41145.

#### Southern Masked Weaver – 15y 4m 15d (BB75791)

	Ringing	Recapture
Date	09/08/1987	18/12/2002
Age	4	4
Sex	0	1
Mass	32	
Birds	30	X
SMW	18	

On 9 August 1987 Mr ARF Williamson from Strubens Valley was ringing at Kloofendal Nature Reserve, Roodepoort, Gauteng, where he caught 30 birds. He ringed a Grassbird, four Cape Weavers, 18 Southern Masked Weavers and five Southern Red Bishops. There were also two recaptures, a Cape Robin and a Black-chested Prinia, both ringed at the same site three years previously. None of these birds was recaptured later, but two were found dead by the general public. Southern Masked Weaver BB75798 was found dead at the same site 1.5 years later.

But more interesting is Southern Masked Weaver with ring BB75791, an adult with mass 32 g. This bird was found dead by Ken Stewart on 18 December 2002 at Wilropark, Roodepoort, 3 km from the ringing



site. The cause of death was unknown, and the bird was freshly dead. The observer noted that it looked like a male.

#### **Thick-billed Weaver – 10y 2m 9d (4H16349)**

	Ringing	Recapture
Date	19/03/2001	25/05/2011
Age	4	4
Sex	2	2
Mass	39.3	36.8
Wing	88	86.5
Birds	8	6
TbW	1	6

On 19 March 2001 Mark Brown caught eight birds at the University of Natal, Pietermaritzburg, KwaZulu-Natal, including one adult female Thick-billed Weaver 4H16349. Thick-billed Weavers were caught in nets and walk-in traps at the university (Brown et al. 2001), and some early recaptures and movements were noted by Brown (2001). This bird was recaptured again seven times by Mark at the university (1y, 3y, 4y, 8y, 10 y). The last recapture of this bird was on 25 May 2011 when six birds, all Thick-billed Weavers, were caught. A second adult female, 4H16364, was retrapped a few days later, having being ringed six months later than 4H16349, making it the second oldest Thick-billed Weaver in the SAFRING database.

In an email, Mark wrote: "these two birds were netted by Minke Witteveen and Dominoc Rollinson, two trainee ringers, 40 m from my office where I can keep an eye on them! We put all the swept up seed from the UKZN Aviaries out for the birds and are visited mostly by Thick-billed Weavers, Laughing Doves, Red-eyed Doves and Greyheaded Sparrows."

## Red-billed Quelea – 7y 4m 5d (FH14281)

	Ringing	Recapture
Date	11/04/2004	13/08/2011
Age	4	4
Sex	2	2
Birds	154	
RbQ	154	

Herman and Zephne Bernitz found a breeding colony of Red-billed Queleas at Klaserie Private Nature Reserve, Mpumalanga, in April 2004 (Bernitz & Bernitz 2004). They used the opportunity to ring quelea on the weekend of 9–11 April, ringing 63, 212 and 154 birds on these three days respectively. No measurements were taken. Ring FH14281 was put on an adult female on 11 April 2004. This bird was found injured on 13 August 2011 near Mutare, Zimbabwe, by Liberty Bingura. This bird died later. The direct distance between ringing and finding sites was 593 km and the elapsed time was 7y 4m 2d. This is greater than the previous record of 7y 1m 12d (ring 60174461).

Craig (1982) listed the oldest quelea as 10 years 0 months, but this record has not been traced in the SAFRING database.



#### Red-headed Quelea - 7y 9m 27d (AB97311)

	Ringing	Recapture
Date	03/01/1991	25/10/1998
Age	4	0
Sex	4	0
Birds	38	66
RhQ	1	3

On 3 January 1991 Dave Johnson ringed 38 birds at Darvill Sewage Works, Pietermaritzburg, KwaZulu-Natal, including one Red-headed Quelea, adult male AB97311. This bird was recaptured again on 25 October 1998 at Darvill when 66 birds were caught. The catch included three Red-headed Queleas, two new birds and the recapture.

This longevity record is similar to that of the Red-billed Quelea, but may also be found to exceed 10 years in the future.

## **Cardinal Quelea – 0y 0m 7d (AC17177)**

	Ringing	Recapture
Date	05/04/1992	12/04/1992
Age	2	5
Sex	0	0
Mass	12.5	12.4
Birds	34	32
CQ	4	1

This bird was ringed and retrapped by Bob Medland at Lilongwe 52 (next to the airport), Malawi. The first catch included many LBJs: 14 Red-billed Quelea, four Cardinal Quelea, six Southern Red Bishops, a Black-winged Bishop, a Red-collared Widow, a Yellow-mantled

Widowbird and a few other species. A week later he ringed there again and this time the LBJ species composition was as follows: two Golden Weavers, two Southern Masked Weavers, three Red-billed Quelea, one Cardinal Quelea, five Southern Red Bishops, two Black-winged Bishops, one Yellow Bishop, seven Red-collared Widows and a few other species.

The Cardinal Quelea was found at the airport in 1991 (Medland & Mallalieu 1991) and 20 were ringed over several ringing sessions in that year. In 1992 there were several ringing sessions at the same site, but only five captures of the Cardinal Quelea as listed above.

#### **Southern Red Bishop – 15y 2m 10d (FA05661)**

	Ringing	Recapture
Date	20/12/2000	25/02/2016
Age	2	4
Sex	0	2
Mass	20.5	20
Wing	63	62
Birds	75	16
SRB	50	3

On 20 December 2000, H. Dieter Oschadleus and Peter Dearlove ringed at the Dundee Quarry, KwaZulu-Natal, ringing 75 birds of six species. The species totals were one Malachite Kingfisher, one Lesser Swamp Warbler, six Cape Weavers, 16 Southern Masked Weavers, 50 Southern Red Bishops and one Common Waxbill. On 25 February 2016 Peter ringed 16 birds at the Dundee Sewage Works, including three Southern Red Bishops, one unringed and two recaptures. Recapture FB31422 had been ringed by Peter at the same site three years previously. Recapture FA05661 was an adult female that Dieter had ringed in 2000 as a recently fledged juvenile at the quarry. The



elapsed time was 15y 2m 10d, and distance moved was 4 km. The previous longevity record for this species was 13y 6m 4d (F65394).

## Black-winged Bishop - 0y 10m 10d (60178430)

	Ringing	Recapture
Date	15/01/1964	20/11/1964
Age	4	0
Sex	2	0
Birds	2	X
BwB	2	

M Thomas ringed a male and female of this species at Ndubeni, Kafue river, near Luanshya, Zambia. The female was killed by an African in the same area 10 months later.

Hanmer (1983) listed a Black-winged (Fire-crowned) Bishop at 7y, but unfortunately no details are given, and this record does not appear to have been submitted to SAFRING.

#### Yellow Bishop - 11y 1m 0d (BC46067)

	Ringing	Recapture
Date	02/02/1995	01/03/2006
Age	4	4
Sex	2	2
Mass		22
Wing		75
Birds	43	89
YB	4	6

Debbie Philogene ringed this bishop at one of her regular sites, Groot Fisantekraal farm, Durbanville, Western Cape. Margaret McCall recaptured it on the same farm (more details in Oschadleus 2016).

#### Yellow-crowned Bishop - 5y 10m 17d (AM31231)

	Ringing	Recapture
Date	04/03/2006	14/01/2012
Age	4	4
Sex	1	1
Mass	16	16
Wing		64
Birds	44	7
YcB	13	4

This bishop was ringed and retrapped by Rita Marais at Roodekraal, near Potchefstroom, North-West Province. On the initial capture date, the Yellow-crowned Bishop was the species caught in largest numbers (13), followed by the Southern Masked Weavers (12) and six Greenwinged Pytilias. On the recapture date, four Yellow-crowned Bishops were caught of which two were new and two were recaptures.



### Red-collared Widowbird – 8y 11m 5d (FA19487)

	Ringing	Recapture
Date	03/11/2001	02/10/2010
Age	4	4
Sex	1	1
Mass	22	22.9
Wing	75	76
Birds	75	13
RcW	4	1

On 3 November 2001 the Pretoria Bird Club ringers (now called BLNG) met at Rietvleidam, Gauteng, and caught 75 birds, with 28 Southern Masked Weavers being the most caught species, followed by 14 African Reed Warblers. Four Red-collared Widowbirds were also caught, three males and an unsexed adult. One of the males (ring FA19487) was ringed by Chris du Plooy.

Eight years later Gerrie Jansen van Rensburg was ringing at Hennopspark, 17 km from Rietvleidam. He caught 13 birds, including the recapture of one Red-collared Widowbird (ring FA19487). The wing and mass were similar at ringing and recapture dates.

## White-winged Widowbird – 9y 11m 28d (F51159)

	Ringing	Recapture
Date	02/01/1994	24/12/2003
Age	4	0
Sex	1	0
Mass	19	
Birds	144	
WwW	5	

On 2 January 1994, Dave Johnson caught 144 birds at Darvill Sewage Works, Pietermaritzburg, KwaZulu-Natal, including five White-winged Widowbirds, one of which was adult female F51159. This bird was recaptured again nine years later by Barry Taylor on 8 February 2003 at Darvill, when 23 birds were caught. Later that year, F51159 was found dead on 24 December 2003, in Hayfields, 2 km from Darvill, after the widow flew into a window. It was reported to Mark Brown.

#### Yellow-mantled Widowbird – 2y 2m 21d (AC14661)

	Ringing	Recapture				
Date	30/06/1991	18/09/1993				
Age	0	0				
Sex	2	0				
Mass	21.6					
Birds	44	9				
YmW	40	3				

This widowbird was ringed and retrapped by RD Medland at Lilongwe, Malawi. On capture, 40 of the birds caught were Yellow-mantled Widowbirds consisting of 22 immatures, six adult males, three adult females and the rest of unknown age. On the recapture date, most birds were Yellow Bishops (five), followed by three Yellow-mantled Widowbirds and one Singing Cisticola.



#### Fan-tailed Widowbird - 9y 6m 29d (BD20152)

	Ringing	Recapture
Date	27/08/1995	21/03/2005
Age	3	4
Sex	1	1
Mass	26	19
Wing		94
Birds	168	69
FtW	10	11

On 27 August 1995, Dave Johnson caught 168 birds at Darvill Sewage Works, Pietermaritzburg, KwaZulu-Natal, including 10 Fan-tailed Widowbirds, of which nine were males (immature or adult), including immature male BD20152. This bird was recaptured three years later by Dave on 12/09/1998 at Darvill when 139 birds were caught. BD20152 was recaptured a second time on 21 March 2005, at Darvill when 69 birds were caught by Mark Brown. The catch included 11 Fan-tailed Widowbirds, of which there was one recapture, which is the oldest Fan-tailed Widowbird on record to date.

## Long-tailed Widowbird – 1y 10m 7d (FB34723)

	Ringing	Recapture
Date	02/02/2013	06/12/2014
Age	4	4
Sex	2	2
Mass		32
Wing		93
Birds	378	391
LtW	6	5

Pretoria Bird Club ringers (now called BLNG) met at Rietvleidam, Gauteng, on 2 February 2013. This widow was ringed by JF du Plooy and retrapped by S Michel. On the capture date, the majority of birds were Southern Red Bishops (278), followed by Southern Masked Weaver (28) and Red-billed Quelea (27). On the recapture date, 6 December 2014, the same three species were once again the most caught birds, with 184, 83, and 26 individuals per species respectively.

#### Overview

The greatest elapsed time for a southern Africa weaver is 15y 4m 15d for a Southern Masked-Weaver *Ploceus velatus* (Table 1). The greatest longevity for any species of weaver is the Seychelles Fody at 16y 7m 17d (Oschadleus 2014).

Usually there was a single recapture for a longevity holder, but sometimes there were many recaptures of the same bird. The record holding birds of the following species had more than one recapture: Thick-billed Weaver (seven recaptures), Sociable Weaver (four), Spectacled Weaver (three), Dark-backed Weaver (two), Village Weaver (two), Golden Weaver (two), Southern Brown-throated Weaver (two), and Fan-tailed Widowbird (two).

In all but four species, the record longevities involved recaptures (rather than recoveries), meaning that the individual still lived longer. For four species the record holders were recoveries (the bird was found dead), although in the case of the White-winged Widowbird there had been one recapture before the bird was found dead.

Most of the longevity records involved birds assigned adult for age at ringing, meaning that most records presented here could be increased by one or two years to obtain the estimated longevity.



Although sex assigned to the weavers needs to be used with caution, there were equal numbers of males and females among the record holders (Appendix 1). 11 were males and 1 were females; one possible male, one possible female; four were not assigned a sex.

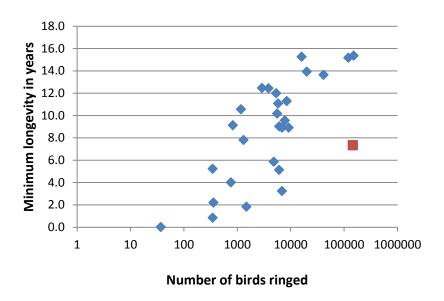
Most recaptures (and some recoveries) were reported from the ringing site. The greatest distances moved of the longevity record holders were the Chestnut Weaver and the Red-billed Quelea.

Twelve weavers have longevity records of more than 10 years. Collingham et al. (2014) showed that clutch size and body mass are explanatory variables which help predict adult survival rate for southern African species. Thus the Red-billed Buffalo-Weaver (the heaviest weaver in southern Africa) is predicted to have the highest survival rate, and thus a greater longevity is possible.

The general pattern is that as more birds of a particular species are ringed, the longevity record for the species gets larger (Figure 2). The Red-billed Quelea is clearly an outlier in this plot. In spite of the large number that have been ringed, its longevity is relatively short.

Table 1. Longevity records of weavers in captivity

Species	Longevity	Reference
Dark-backed Weaver	10+ y	Seibt et al. 2002
Lesser Masked Weaver	19 y	Davis 1945
Village Weaver	24 y	Collias et al. 1986
Southern Masked Weaver	>23.5 y	del Hoyo et al. 2010
Red-billed Quelea	18.75 y	Butler 1913
Fire-crowned Bishop	>10 y	Adlersparre 1938
Yellow Bishop	18y 10m	Donnelly 1965
Yellow-crowned Bishop	>20 y	Adlersparre 1938
Long-tailed Widowbird	nearly 18y	Schifter 1970



**Figure 2.** Minimum longevity in relation to number of birds ringed in southern African weavers. Note that the x-axis is plotted on a logarithmic scale. The red square is for the Red-billed Quelea. See Appendix 1 for the data values displayed on this graph.

There are several published records of longevities greater than reported here (see the species accounts for Dark-backed Weaver, Red-headed Weaver, Southern Brown-throated Weaver). In three cases these discrepancies are due to the publication using *estimated* longevity

For four weaver species there are published longevity records that cannot be verified, because no details were provided: Village Weaver, Red-billed Quelea, and Black-winged Bishop (see the species accounts for details).



Weavers are popular aviary birds. In captivity, seven species have longevity records exceeding 15 years (Table 1). The longest was a Village Weaver aged 24y.

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#### References

**Adlersparre A** 1938. Erscheinungen des physiologischen Alterns bei Voegeln. Ornithologischen Monatsberichte 46: 176–177.

**Bernitz Z, Bernitz H** 2004. Observations at a breeding colony of Redbilled Quelea in the Klaserie Private Nature Reserve. Bird Numbers 13(2): 25–28.

**Brown M** 2001. Interesting recaptures around Pietermaritzburg. Blue Swallow 14(2): 25–26.

**Brown M, Symes C, Downs C** 2001. Biometrics and moult of the Thickbilled Weaver in Pietermaritzburg. Afring News 30: 60–63.

**Butler AG** 1913. Longevity in captivity and deaths of old friends. Avicultural Magazine 4: 367–370.

**Collias NE, Collias EC, Jacobs CH, Cox CR, McAlary FA** 1986. Old age and breeding behaviour in a tropical passerine bird *Ploceus cucullatus* under controlled conditions. Auk 103: 408–419.

Collingham YC, Huntley B, Altwegg R, Barnard P, Beveridge OS, Gregory RD, Mason LR, Oschadleus HD, Simmons RE, Willis SG, Green RE 2014. Prediction of mean adult survival rates of southern

African birds from demographic and ecological covariates. Ibis 156: 741–754.

**Covas R** 2012. The benefits of long-term studies: 16-year old sociable weaver caught at Benfontein Game Reserve. Afring News 41: 11–12.

**Covas R, Brown CR, Anderson MD, Brown MB** 2004. Juvenile and adult survival in the Sociable Weaver *Philetairus socius*, a southern-temperate colonial cooperative breeder in Africa. Auk 121: 1199–1207.

**Craig A** 1982. Mortality rates of some South African Ploceidae. Ostrich 53: 54–57.

**Davis M** 1945. Longevity record of Black-cheeked Weaver. Auk 62: 451–452.

**Donnelly BG** 1965. Longevity in the Yellow-backed Bishop, *Euplectes capensis*, in captivity. Ostrich 36: 145.

de Beer SJ, Lockwood GM, Raijmakers JHFA, Raijmakers JMH, Scott WA, Oschadleus HD, Underhill LG 2001. SAFRING bird ringing manual. Cape Town: Avian Demography Unit, University of Cape Town.

**del Hoyo J, Elliott A, Christie DA (ed)** 2010. Handbook of the birds of the World. Vol. 15. Weavers to New World warblers. Lynx Edicions, Barcelona.

**Hanmer DB** 1983. Longevity from retraps continued. Safring News 12: 56–64.

**Hanmer DB** 1984. The Brown-throated Golden Weaver *Ploceus xanthopterus* from Moçambique and Malawi. In: Ledger J (ed).



Proceedings of the Fifth Pan-African Ornithological Congress. SAOS, Johannesburg: 121–148.

**Hanmer DB** 1987. Getting older in Malawi. Safring News 16: 73–78.

**Hanmer DB** 1989. The end of an era – final longevity figures for Nchalo. Safring News 18: 19–30.

**Hanmer DB** 2009. What is the longevity of birds in the Eastern Highlands? Honeyguide 55(1): 41–44.

Hockey PAR, Dean WRJ, Ryan PG (eds) 2005. Roberts birds of southern Africa, 7th ed. John Voelcker Bird Book Fund, Cape Town

**Medland RD, Mallalieu M** 1991. Second record of Cardinal Quelea in Malawi. Vocifer, a Bulletin of Ornithological News in Malawi 16: 8–11.

**Møller AP** 2006. Sociality, age at first reproduction and senescence: comparative analyses of birds. Journal of Evolutionary Biology 19: 682–689.

**Oschadleus HD** 2011. Chestnut Weaver movements in southern Africa. Afring News 40: 1–3.

**Oschadleus HD** 2012. Oldest Sociable Weaver. BirdLife South Africa E-newsletter June 2012: 6.

**Oschadleus HD** 2014. Seychelles Fody longevity. Afring News 43: 11–13.

Oschadleus HD 2016. Oldest Yellow Bishop. Kite 112: 7.

**Schifter H** 1970. Longevity in the Longtailed Widowbird in captivity. Ostrich 41: 255.

**Seibt U, Wickler W, Kleindienst H-U, Sonnenschein E** 2002. Structure, geography and origin of dialects in the traditive song of the Forest Weaver *Ploceus bicolor sclateri* in Natal, S. Africa. Behaviour 139: 1237–1265.

**Skead DM** 1979. A brief report of ringing at Barberspan including the 1978/79 report. Safring News 8: 51–56.

**Wasser DE, Sherman PW** 2010. Avian longevities and their interpretation under evolutionary theories of senescence. Journal of Zoology 280: 103–155.



**Appendix 1.** Longevity records for southern African weavers. Age: ad=adult, imm=immature, juv=juvenile, unk=unknown

Sex: m=male, f=female, u=unknown

Dist: distance in km between ringing and final reporting site

Code: 2=recapture, X=recovery

Ringed, retr(apped), recov(ered): numbers for the species between 1948 and 7 August 2016, in the SAFRING database

% report=(Retr+Recov)\*100/Ringed, i.e. % birds retrapped or recovered

No.	Species	Elapsed time	Ring no.	Age at ringing	Sex	Dist (km)	Code	Ringed	Retr	Recov	% report
779	Red-billed Buffalo-Weaver Bubalornis niger	4y 0m 7d	5H17931	Ad	М	0	2	759	16	3	2.5
780	White-browed Sparrow-Weaver Plocepasser mahali	11y 3m 22d	BC96612	Ad	U	2.5	2	8,482	6534	35	77.4
783	Sociable Weaver Philetairus socius	15y 3m 9d	BC42438	Ad	M?	0	2	16,065	8505	283	54.7
789	Scaly-feathered Finch Sporopipes squamifrons	5y 1m 21d	GA28835	Ad	F	4.1	2	6,079	512	15	8.7
790	Dark-backed Weaver Ploceus bicolor	5y 2m 28d	BH34002	Ad	F	0	2	347	31		8.9
791	Spectacled Weaver Ploceus ocularis	12y 5m 12d	BB38355	Ad	F	0	2	3,846	740	9	19.5
792	Lesser Masked Weaver <i>Ploceus</i> intermedius	9y 0m 12d	AE94754	Ad	М	2.0	2	6,128	140	16	2.5
793	Red-headed Weaver Anaplectes rubriceps	9y 1m 18d	BC07566	Ad	F	0	2	824	70		8.5
796	Chestnut Weaver Ploceus rubiginosus	3y 3m 2d	BH15335	Ad	М	580	Х	6,893	44	5	0.7
797	Village Weaver Ploceus cucullatus	13y 11m 15d	CC05299	Ad	М	0	2	20,102	849	164	5.0
799	Cape Weaver Ploceus capensis	13y 7m 28d	BB74847	Ad	М	0	2	41,455	3775	287	9.8
800	Yellow Weaver Ploceus subaureus	12y 0m 3d	BH12812	Ad	М	0	2	5,347	462	22	9.1
801	Golden Weaver Ploceus xanthops	10y 6m 27d	4A02074	Ad	М	0	2	1,177	60	10	5.9
802	Southern Brown-throated Weaver <i>Ploceus</i> xanthopterus	12y 5m 22d	AA41145	Juv	U	0	2	2,896	265	12	9.6
803	Southern Masked Weaver Ploceus velatus	15y 4m 15d	BB75791	Ad	М	3.0	Х	151,747	8100	702	5.8
804	Thick-billed Weaver Amblyospiza albifrons	10y 2m 9d	4H16349	Ad	F	0	2	5,590	489	32	9.3
805	Red-billed Quelea Quelea quelea	7y 4m 5d	FH14281	Ad	F	593	х	145,814	266	562	0.6
806	Red-headed Quelea Quelea erythrops	7y 9m 27d	AB97311	Ad	F?	0	2	1,315	20	3	1.7



No.	Species	Elapsed	Ring no.	Age at	Sex	Dist	Code	Ringed	Retr	Recov	%
		time		ringing							report
807	Cardinal Quelea Quelea cardinalis	0y 0m 7d	AC17177	Juv	U	0	2	37	1		2.7
808	Southern Red Bishop Euplectes orix	15y 2m 10d	FA05661	Juv	F	4.0	2	120,700	5104	287	4.5
809	Black-winged Bishop Euplectes hordeaceus	0y 10m 10d	6017843 0	Ad	F	0	Х	347	6	3	2.6
810	Yellow Bishop Euplectes capensis	11y 1m 0d	BC46067	Ad	F	0	2	5,836	648	18	11.4
812	Yellow-crowned Bishop Euplectes afer	5y 10m 17d	AM31231	Ad	М	0	2	4,835	23	1	0.5
813	Red-collared Widowbird Euplectes ardens	8y 11m 5d	FA19487	Ad	М	17	2	6,930	141	18	2.3
814	White-winged Widowbird Euplectes albonotatus	8y 11m 4d	F60985	Ad	М	0	2	9,186	148	6	1.7
815	Yellow-mantled Widowbird Euplectes macroura	2y 2m 21d	AC14661	Unk	F	0	2	358	24		6.7
816	Fan-tailed Widowbird Euplectes axillaris	9y 6m 29d	BD20152	Imm	U	1.9	2	7,777	559	20	7.4
818	Long-tailed Widowbird Euplectes progne	1y 10m 7d	FB34723	Ad	F	0	2	1,486	8		0.5