



Biodiversity Observations

<http://bo.adu.org.za>



An electronic journal published by the Animal Demography Unit at the University of Cape Town

The scope of Biodiversity Observations consists of papers describing observations about biodiversity in general, including animals, plants, algae and fungi. This includes observations of behaviour, breeding and flowering patterns, distributions and range extensions, foraging, food, movement, measurements, habitat and colouration/plumage variations. Biotic interactions such as pollination, fruit dispersal, herbivory and predation fall within the scope, as well as the use of indigenous and exotic species by humans. Observations of naturalised plants and animals will also be considered. Biodiversity Observations will also publish a variety of other interesting or relevant biodiversity material: reports of projects and conferences, annotated checklists for a site or region, specialist bibliographies, book reviews and any other appropriate material. Further details and guidelines to authors are on this website.

Lead Editor: Arnold van der Westhuizen – Paper Editor: H. Dieter Oschadleus

OBSERVATIONS ON A SECRETARYBIRD NEST AT LANGFONTEIN, PETRUSBURG DISTRICT, FREE STATE

Dawid H. de Swardt

Recommended citation format:

deSwardt DH 2016.Observations on a Secretarybird nest at Langfontein, Petrusburg district, Free State. Biodiversity Observations 7.64:1-4

URL: <http://bo.adu.org.za/content.php?id=257>

Published online: 5 September 2016

AFRING NEWS / BREEDING BIOLOGY

OBSERVATIONS ON A SECRETARYBIRD NEST AT
LANGFONTEIN, PETRUSBURG DISTRICT, FREE
STATE

Dawid H. de Swardt

Department of Ornithology, National Museum, PO Box 266, Bloemfontein
9300, South Africa

*Corresponding author: dawie@nasmus.co.za

Introduction

Breeding observations on Secretarybirds *Sagittarius serpentarius* in the Free State, South Africa, are well documented (de Swardt 2002, 2007). During 2009 a project was initiated to fit patagial tags on Secretarybird nestlings in the Free State and Eastern Cape for individual recognition (de Swardt & van der Westhuizen 2010). So far at least 3 patagial tagged birds were recovered or resighted away from their ringing sites (unpubl. data). BirdLife SA recently started to monitor Secretarybirds and to fit nestlings with satellite transmitters (see <http://www.birdlife.org.za/conservation/terrestrial-bird-conservation/threatened-species/secretarybird>). As part of the project, notifications were made to the project leader of BLSA Secretarybird project (Ernst Retief) about nests which were located in the Bloemfontein area and Free State Province and attempts were made to visit the nest sites and later to ring and (if applicable) to fit satellite transmitters to the nestlings.

During December 2013 Birdlife Free State members notified me about a nest on a farm in the Koffiefontein district. The nest was visited in early January 2014 to monitor the nest. It was estimated that the chick could be ringed during the last week of January 2014.



Fig. 1. Location of the Secretarybird nest site on the Petrusburg – Koffiefontein road. Nest tree indicated by an arrow.



Fig. 2. Closer view of Secretarybird nest on top of *Vachellia* tree. The nest is 6.5 m in the centre of the crown of the tree

On 31 January 2014 the Koffiefontein nest site was visited (accompanied by Sandra Bishop) to join Ernst Retief (BLSA) and a representative of Petra Diamonds at Koffiefontein to ring the chick and to fit the transmitter on the nestling (see Bishop 2014).

Langfontein/Petrusburg nest

This note reports on another nest located outside Petrusburg in January 2014 and attempts were made to monitor the nest for several months. En route to the Koffiefontein nest site I stopped to start a SABAP2 list of a pentad (2910_2515) outside Petrusburg. While scanning the area, I observed a pair of Secretarybirds on top of a large *Vachellia* tree about a kilometer from the tarred road (Figure 1) and realized that the tree could contain a nest. The nest was on the farm Langfontein (29° 10' 23.2"S; 25° 20' 21.8"E) about 10 kilometres outside Petrusburg. Arriving at the nest tree, the adults were still in vicinity of the tree and I observed one bird carry a stick to the tree. I could see the beginning of the nest construction and a few sticks in the canopy of the tree. Secretarybird feathers and white "dung" were lying under the tree, given indications of possible roosting or nesting. With high hopes I left the area, not thinking of the possibility to revisit the nest site again.

The Langfontein nest site was revisited on 16 May 2014 and while driving on the Petrusburg – Koffiefontein road, the adult pair was seen standing on top of the nest tree. Access was later obtained to visit the nest site and the completed nest in the *Vachellia* spp. tree could be seen from below. From the side, the tail of a sitting Secretarybird was also visible. The nest was at least 6.5 m high in the centre of the canopy of the tree (Figure 2) and I had to revisit the nest with a ladder to see its possible contents. It was not possible to estimate an exact nest building period as Dean & Simmons (2005) mention that the adult pair can roost on nest tree for several months before the first eggs are laid. At this time (16 May), the nest was

already completed after 14 – 15 weeks after first discovery during the last week of January 2014. A follow-up visit was made on 28 May - my ladder was placed on top of the vehicle and with the help of my nest mirror I could see that no eggs were yet laid. The pair was seen standing on the nest from far, probably during the period when final nest material was added. It is also known that females sit on nest for at least two weeks before egg laying starts (Steyn 1982).

On 29 August 2014 the nest site was visited with the assistance of the farmer (Stefan Bester) and we used his Tractor-Loader-Backhoe (TLB) to get access to the nest (the ladder standing in the "bak" of the TLB (Figure 3). The adult was sitting very tight on the nest (and lying low – I could not see the bird). When the bird flushed, a clutch of 3 eggs was seen in the nest pad. A follow-up visit was again made on 26 September and only one chick hatched from the 3 egg clutch. The chick was estimated to be about a week old (Figure 4). 2014 experienced a dry year with low rainfall in the southern and western Free State, resulting in food shortages, so it was not surprising that only one chick hatched.

On 6 November 2014 the nest was revisited again to ring the nestling (the chick now about 7 weeks) in the nest with ring no. 9A54335. No patagial tags could be fitted when it was older as access to the nest then was with the ladder on top of a cattle truck and the chick could not be removed from the nest for handling. The chick also showed interesting behaviour, standing on its heels with open wings and giving croaking calls (Figure 5). This behaviour was observed in previous nests in the Bloemfontein area (de Swardt 1990)

Dean & Simmons (2005) and Tarboton (2011) only provided nest descriptions, nest tree sites and nest measurements in Secretarybird nests without referring to nest building periods. Although the nest was located early during the nest building stage (the pair had just started to lay sticks in nest tree), no confirmed data about the nest

building period could be collected. The nest was already completed (with no eggs in it) on the first visit in late May 2014, so the nest completion date is unknown.



Fig. 3. It was quite an effort to reach the nest. Thanks to the assistance of the farmer with every visit I was able to reach it withstanding with ladder on TLB or cattle truck! (photo: Volksblad)



Fig. 4. Only one egg hatched from a 3 egg clutch. The Secretarybird nestling was about a week old on 26 September 2014. During this visit the female was still sitting covering the chick.

References

Bishop SD 2014. Petra Secretarybird. *Sakabula* 46: 5-7.

De Swardt DH 1990. Growth and behaviour of Secretarybird nestling. *Gabar* 5:22.

De Swardt DH 2002. Breeding observations on the nest of a Secretarybird. *Bird Numbers* 11: 29-31.

De Swardt DH 2007. Another record of a Secretarybird *Sagittarius serpentarius* raising three nestlings in the Free State, South Africa. *Gabar* 18: 9-14.

De Swardt DH, van der Westhuizen A 2010. First Secretarybirds *Sagittarius serpentarius* ringed with patagial tags in the Free State. *Gabar* 21:56-59.

Dean WRJ, Simmons RE 2005. Secretarybird. In: Hockey PAR, Dean WRJ, Ryan PG. (eds). *Roberts - Birds of Southern Africa* (VII th Ed). The Trustees of the John Voelcker Bird Book Fund: Cape Town. pp. 542 - 543.

Steyn P 1982. *Birds of prey of Southern Africa*. David Philip. Cape Town.

Tarboton WR 2011. *Roberts nests & eggs of southern African birds*. John Voelcker Bird Book Fund. Cape Town.



Fig. 5. The Secretarybird nestling was ringed in the nest on 6 November 2014 and was about 7 weeks old. The nestling was standing on its heels and with open wings giving croaking calls.