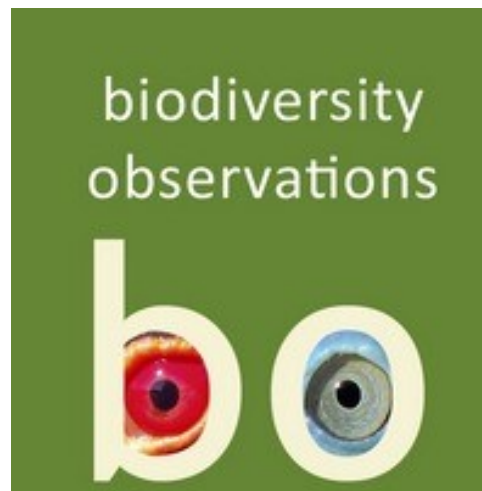


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Ornithology

Sparrows roosting and breeding in old nests of Cape Weavers *Ploceus capensis*

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Abstract

The first record of Southern Grey-headed Sparrows *Passer diffusus* breeding in a nest in an old colony of Cape Weavers *Ploceus capensis* is described. This is the second record of this species breeding in any weaver nest. A pair of Cape Sparrows *Passer melanurus* were observed roosting in another nest in the colony. They returned to the same nest during the night after being disturbed.

Some sparrows are known to roost and breed in old weaver nests (Oschadleus et al. 2017, Oschadleus & McCarthy 2015, Oschadleus 2018). This note reports observations providing new information on

sparrows using weaver nests. A bird ringing course was held from 1–7 February 2023, with a base at Botuin Cottages & Olive Farm (31° 36'47S 18°45'09"E) on the outskirts of Vanrhynsdorp, in the northern Western Cape, South Africa. Botuin is a 5-ha farm with 400 olive trees, a lucerne field, a well-established garden and a wide variety of fruit trees. Consequently, there is a wide range of bird species present.

Next to a garage is a large *Prosopis* tree where Cape Weavers *Ploceus capensis* breed during summer (Figure 1). There were 16 old nests in this tree, but there probably had been more during the peak of the breeding season, which would have finished several months previously. Two sparrow species were observed using weaver nests,



Figure 1: *Prosopis* tree with Cape Weaver colony. Red circles indicate positions of weaver nests used by sparrows – Cape Sparrows roosting (left circle) and Southern Grey-headed Sparrows breeding (right circle).

and I made notes on paper while I observed these sparrows.

Southern Grey-headed Sparrows *Passer diffusus* breeding

On 2 February at 13h10 while walking under the *Prosopis* tree I heard chicks calling in one of the highest weaver nests, and an adult Southern Grey-headed Sparrow *Passer diffusus* perched on top of a nearby nest. Independently of this observation, we had mist nets scattered around the gardens, and caught two Southern Grey-headed Sparrows, one had been ringed at 09h34 with SAFRING ring FB49452 and the other was ringed at 17h23 with ring BE66803. That night I used my spotlight to look at the nest at 20h30 when it was dark, but the light was too poor to see any adults brooding; the chicks would be crouched too low to see.

On 3 February at 07h35 I observed two adults near the same nest (Figure 2). One bird perched on a twig near the nest, while the other clung to the nest entrance. Chicks could be heard, but not seen, calling softly while the adult fed them. The adult flew off, and the second sparrow flew to the nest and fed the chicks.

Over the next few days I was aware of the adults feeding chicks once or twice while walking past to check nets, but did not stop to record details. On 5 February we ringed a third Southern Grey-headed Sparrow at 09h30 with ring BF17966.

On 7 February I decided to keep the nest under observation from a position on a nearby cottage veranda where my presence would not disturb the birds. I watched the nest from 16h40–17h40 but was absent for a few minutes. I heard no chicks and did not see the adult sparrows near the nest. At 17h45 I put some ringing poles together and gently tapped the nest, but heard no chicks calling. Using three poles I could measure the nest height to be 4.5m high.

Cape Sparrows *Passer melanurus* roosting

On 5 February at 20h15 I used my spotlight once again to look at the nest with Southern Grey-headed Sparrows; it was dark, but there was



Figure 2: (a) Adult Southern Grey-headed Sparrow feeding chicks in old Cape Weaver nest, while (b) the other adult perched nearby.

still some sunset glow in the west. I also scanned the other nests in the tree, but most were too high to see if birds were roosting in any nests. There was one exception; two birds flew out from a low hanging nest. One of the birds landed on a nearby twig and could clearly be seen to be a female Cape Sparrow *Passer melanurus*. The other bird flew high in the tree and was hidden from view by leaves. The nest had some fluff trailing from the entrance, which I later photographed during daylight (Figure 3). On the morning of 6 February I was up before dawn to open nets, so I had a “spotlight look” at the same nest at 04h55, and was surprised that two Cape Sparrows flew out, indicating that the pair had returned to roost in the nest after being disturbed the previous evening. Again, the female was clearly seen in the light of the spotlight.

On the evening of 7 February, I considered trying to trap the sparrows with a hand net. I approached the nest at 20h40 but two birds were disturbed by the kitchen light being turned on – although the kitchen is some distance away, the light is visible from the nest and the sparrows may have been jittery due to my previous spotlight checks. I did not have my spotlight on, but it is likely to have been the same pair of sparrows. Nest height was not measured but estimated at 3 m based on holding the hand net. On 8 February at 05h45 I went outside as it was getting light and two sparrows flew out the nest.

During the week 33 Cape Sparrows were ringed and five were recaptured, so the roosting pair may have been ringed. One pair of Cape Sparrows was seen to roost in a hole in the roof of a shed, and there were several Cape Sparrow nests in different trees in the garden that may have been used for roosting by other pairs.

Discussion

In the Western Cape, egg-laying by Cape Weavers is from July to November (Oschadleus 2005), and all nests at Botuin would have been abandoned by February, leaving them available for use by other species. Cape Weavers were still seen visiting the garden, and 12 were ringed and two were recaptured during the week’s ringing course, but they may have been roosting elsewhere at night.



Figure 3: The Cape Weaver nest in which the Cape Sparrow pair was roosting on several successive nights, with some nesting material trailing out from the entrance.

At least two different sparrow species were using weaver nests in the same colony at the same time, but in widely separated nests (Figure 1). Red-headed Finches *Amadina erythrocephala* were seen once during the week of the bird ringing course, and one was caught and ringed at Botuin. This finch also roosts and breeds in weaver nests and may have done so here, although I then would have expected to see them more often.

Southern Grey-headed Sparrow

It is not clear what happened with the Southern Grey-headed Sparrow chicks. They may have fledged, although no juveniles were observed calling in the area. The chicks could have died or been predated, but there were no signs of nest damage. Possibly, the breeding

event continued, and there just happened to be a long absence of parents during my observation watch, and the chicks may have remained silent for the pole tap.

Irrespective of the outcome, the sparrows had incubated and hatched chicks successfully in the weaver nest. This is the first record of this sparrow breeding in a Cape Weaver nest. There is a record of this species raising three chicks in the nest chamber of a Red-billed Buffalo-Weaver *Bubalornis niger* in Zimbabwe (Barry 2001). There is also a second-hand record of the Northern Grey-headed Sparrow *Passer griseus* ousting Speke's Weavers to breed in their nests (Shelley 1905). Both of these sparrows were classified as rare nest adopters of weaver nests (Oschadleus 2018).

Cape Sparrow

Cape Sparrows are known to roost and to breed in the nests of Cape Weavers (Oschadleus et al. 2017, Oschadleus & McCarthy 2015). It is interesting that the pair of Cape Sparrows kept returning to the Cape Weaver nest, indicating that the benefits exceeded the disturbance levels. The fluff trailing from the nest may have been added by the sparrows (Figure 3).

Weavers and sparrows roosting in relatively low hanging nests usually fly out when disturbed at night, while those sleeping in high nests remain in the nest (Oschadleus et al. 2017). The nest used by the Cape Sparrows in this study was the lowest of all the weaver nests. Other than my checks, there was probably little disturbance at night. The Cape Sparrows used the single lowest nest (about 3 m high) and the Southern Grey-headed Sparrows used one of the second lowest nests (several were at c. 4.5m). There was a set of nests even higher. Bailey et al. (2016) suggested that lower nests over water may be safer from predators and may experience less wind force.

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