



Southern Ground Hornbill Project
Associated Private Nature Reserves, South Africa



Southern Ground Hornbill Research and Conservation Project – January Quarterly Report 2020

Breeding season so far

A great year for the birds! After what appeared to be a slow start to the season, some rainfall resulted in a turn around. We are happy to report that a total of 12 groups have attempted to breed this year. Most of the eggs were laid in early December with 10 of the groups laying within two weeks of each other.

So far, all the nesting attempts are still ongoing except for one which failed for unknown reasons. Although, from the limited camera trap footage we have, it appears that the female was off the nest for large periods of time.

Successful groups to date

Timbavati PNR: Karan Khaya, Rhino Road, Lornay and Johnniesdale

Klaserie PNR: Janovsky, Copenhagen, Senalala, Pitlochry

Umbabat PNR: Ntsiri

Thornybush GR: Thornybush

Balule PNR (Jejane): Jejane

Unsuccessful group

Timbavati PNR: Hermansburg

Interestingly, camera trap footage has shown that Rhino Road group (Timbavati PNR) has displaced the neighbouring group (Addger group) and is currently occupying their nest. We are still unsure as to where Addger group has moved to and how far they have been displaced.

Johnniesdale group (Timbavati PNR) is also occupying one of the newly placed nests. It was taken to instantly and there is currently a chick inside (Figure 1). The new nest on Balule (York region) has also seen some interest from the birds. While they did not lay this season, it is a good sign for the years to come.



Figure 1. Johnniesdale male providing lining at the newly placed nest

Status of nests

During the course of this breeding season, we have lost three nests. Sadly, one of these nests (Lillydale on Timbavati PNR) was one of the few remaining natural nests (Figure 2). This leaves only two viable natural cavities for ground hornbill breeding throughout the APNR. The other two nests which were destroyed were Giraffe nest and Rhino Road nest, both of which were on Timbavati PNR. Rhino Road nest was fully lined before being destroyed so we assume that the movement into Addger nest was relatively fast.



Figure 2. The collapse of Lillydale natural nest

Injured bird

During the rounds of nest checks in early December, we arrived at Copenhagen nest (Klaserie PNR) where we instantly observed a bird leaving the nest. This is usually a positive sign, however, on inspection of the nest, we discovered a female bird inside. This bird appeared to be dead, however, after a closer look, we noticed that the bird was still alive, although movement was very limited. We removed her and took her to Onderstepoort Veterinary Hospital where the bird was cared for and rehabilitated. The injuries included several holes in the neck and head, as well as a severe concussion (Figure 3).

After a quick recovery, the bird was recollected for release back into Klaserie PNR in an area where there were currently no breeding groups. However, the first release did not go to plan as the female laid an egg inside the crate during transport and was reluctant to leave. The bird was kept overnight, and the egg was taken before the second release where the bird flew off. She has not been seen since the release.

The egg was taken to Loskop Dam in the hope that the egg could be fostered, and DNA could be taken to identify which male mated with the female. Unfortunately, the egg went missing several days later and no DNA was acquired.

The female was a ringed bird and was found to be the former alpha female from the neighbouring Pitlochry group (Klaserie PNR). She was ringed in 2007 as an adult and so was a minimum of 20 years old. Pitlochry group now has a new alpha female and so we suspect that she was an outcast.

Following the collection of the injured bird from the nest, the resident alpha female at Copenhagen group laid an egg only a few days later.



Figure 3. Injuries sustained from attack (left) and an x-ray of the head (right)

New research

The research conducted this season has been very successful and all has been going smoothly. We are currently busy with the statistic analyses for two of the chapters for my thesis. These chapters are on the ground hornbill vocalisations and the long-term breeding success of the birds. Camera traps are still out at the nests collecting data and we will be beginning the playback experiments again within the next few weeks.

Additionally, research assistant Carrie Hickman has been offered the opportunity to do her Masters degree on the ground hornbills. Carrie has been the field assistant for the project for the past four years and her work will tie in largely with the climate research being conducted, looking into how temperature might affect the growth rates of nestlings within the nest.

New ground hornbill vehicle

The ground hornbill project finally has a new vehicle (Figure 4). While the vehicle is currently unbranded, the decals are on the way and should be on the vehicle soon.

We have already noticed a difference in the behaviour of the birds with the new vehicle. After years of research in the old vehicle, it appears that the birds were very aware of it and avoided it. We are now able to approach closer, allowing us to get better visuals of the birds which could potentially help with our individual recognition work.

A big thank you once again to all of those who donated and made this possible, as well as the Mabula Ground Hornbill Project for allowing us to use their vehicle in the interim.



Figure 4. The new ground hornbill vehicle

Bromvoël Sandwich Bar

A new sandwich bar has opened in Hoedspruit town (Figure 5). This restaurant is located next to the Wild Dogz Burger Bar and will help raise awareness for the birds. If all goes well, it will also help provide some funding towards the project which will likely be used for purchasing new camera traps and other necessary equipment.



Figure 5. The new Bromvoël Sandwich Bar logo

Acknowledgements

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