



Mission critical

Saving the Southern Ground Hornbill from extinction

the writing is on the wall. We are facing a crisis. Saving wildlife for future generations requires urgent and decisive action. And it's not just animals such as the rhino and the African wild dog who are on the verge of extinction, but also the likes of the Southern Ground Hornbill that need to be saved. Now, thanks to the efforts of a dedicated team of conservationists and Airlink, these bird numbers are starting to look healthier.

Southern Ground Hornbills (*Bucorvus leadbeateri*) are special birds for various reasons. Besides being among the most iconic emblems and charismatic members of South Africa's savannah fauna, they are also culturally revered and biologically unique. Like all hornbills, they nest in holes or hollows in trees and occasionally in rocky cliffs or earth banks. Interestingly, they are the only hornbills not to seal up the entrance to their nest cavity.

On average, Southern Ground Hornbills can live as long as 50 years. However, they breed very slowly, only fledging one chick every nine years. Also, they only start to breed when they are nine years old. They live in groups of as many as nine birds but with only an alpha pair that breeds. The rest of the group helps to defend the territory, feed the incubating female, and provision for the chick when he hatches. Ground Hornbills need extensive areas of savannah to roam. For example, in the Kruger National Park they require an average density of 100km² per group but up to 250km² per group in the drier Limpopo Valley. All these factors make Ground Hornbills vulnerable to extinction. The birds are now officially on the endangered status in South Africa as the population continues to decline. About half of the population is safe within the borders of the greater Kruger region but the populations outside of this area are in trouble.

Natural insurance policy

The myriad threats they face are mostly human-induced. Their natural predators in conservation areas include leopard, caracal, honey badger and martial eagle and they are also prey to Newcastle's disease. All of these have a massive impact on juvenile survival. The adults that survive must then also avoid poisoning either directly from poisoned bait put out for predatory



or rabid pests such as jackals, or indirectly by incorrect use of agricultural pesticides that poison insects but then, in turn, poison hornbills. They also face persecution for breaking windows when their highly territorial nature has them fighting the 'enemy' seen in their reflections as well as being caught for the live trade, killed for traditional medicine or electrocuted on transformer boxes.

What may save them is their natural insurance policy. They usually lay two eggs about four to six days apart, but only one of the chicks who hatch survives to fledging. If the first chick is strong and healthy, then the parents will neglect the second chick and he dies of starvation, dehydration or even maternal cannibalism. However, if something is wrong with the first chick – if he is not feeding properly or is born with a deformity – then the parents will rear the second chick instead. This is their insurance policy to ensure all their efforts during the early breeding season bear fruit.

The redundant second chick gives conservationists the chance to work towards slowing and ultimately reversing the population decline. One such initiative is the Mabula Ground Hornbill Project. After the first egg has hatched, the Mabula Ground Hornbill Project, in collaboration with the Endangered Wildlife Trust and the Percy FitzPatrick Institute of Ornithology, harvests these 'doomed' second chicks within a few days of their hatching.

However, these chicks then need to be swiftly and carefully transported to expert hand-rearers at a number of institutions that are committed to the future of these

*Assistant Manager
Natasha Nienaber about
to board an Airlink flight
from Phalaborwa to
Johannesburg with one
of the harvested chicks*

birds. These include the Mpumalanga Parks and Tourism Agency, Johannesburg Zoo, Montecasino Bird Gardens and Boscia Birds. Stress is a large factor in compromising the pink little chick's chances of survival, hence getting the birds quickly and comfortably to the rearers is vital. Here, Airlink has partnered with the project to help facilitate a stress-free journey to hand rearers.

Once harvested, the chicks board an Airlink flight from Phalaborwa or Nelspruit direct to the waiting hand rearers in Johannesburg. This speedy transit keeps stress to a minimum, gives the chicks a good chance of survival and frees up valuable conservation time and funding that could be better spent on fuel, vehicle maintenance and expanding education and awareness programmes to protect the birds in rural areas.

The provision of flights for these chicks and a human carer has completely changed the harvesting season, for the team and for the chicks themselves. Before this, team members used to drive the birds all the way from the nests to the waiting hand rearers at Johannesburg Zoo and Loskop Dam. These roundtrips often lasted well over 20 hours, putting strain on the vehicles, fuel budget and drivers. More importantly, the long transit time put strain on the chicks. Any amount of stress compromises their immune systems. Now that the long drives have been abolished, the chicks are getting to the rearers faster and calmer, thereby significantly improving their chances of survival.

Once these harvested chicks fledge from their artificial nests, they become either valuable members of a captive-breeding programme coordinated by the National Zoological Gardens or are released by the Mabula Ground Hornbill Project back into wild areas where they have become locally extinct.

Thus far, all but two of the 11 harvested chicks have survived and are growing well. The surviving chicks, mostly from the Kruger National Park and the Associated Private Nature Reserves, are named after their nests: Karan Khaya (APNR), Mangake (KNP), Phalaborwa (KNP), Tinto (Phalaborwa Mining Company), Mokaikai (Mabula), Mudzadzene (KNP), Janovski (APNR), Hull (APNR) and Jumbo (KNP).

Text | **Lucy Kemp** Photography | **Supplied**

About the Southern Ground Hornbill



The Southern Ground Hornbill is now classed as an endangered species in South Africa and, without conservation intervention, it is projected we will lose them in 50 to 100 years. They are special birds for a number of reasons:

- They are a flagship species, threatened with extinction on Africa's savannahs along with other charismatic animals such as rhinos, cheetah, secretary birds and wild dogs.
- Only about 400 to 500 groups remain in South Africa, half of them safe within the boundaries of the greater Kruger National Park.
- They eat small animals, anything from termites to snakes, making them respected across the continent for their role in pest control.
- They are the largest birds in the world to breed in cooperative groups of three to 12. Only one pair breeds and the rest help them raise the chick.
- Each group defends a huge territory of 100 to 250km².
- Their deep booming calls can be heard up to 5km away and are used as a natural alarm clock and an African drumming rhythm.



You can help save the Southern Ground Hornbill. Send any sighting records you have of ground-hornbill, especially outside of Kruger National Park. This is vital for monitoring the health of the populations, and allows the Mabula Ground Hornbill Project to find new groups and nests. Send any records or observation to sightings@ground-hornbill.org.za.