

# Mabula Ground-Hornbill Project

## Progress Report

Reporting Period  
October 2016 – March 2017



**SUMMARY:** The genetic analyses are completed and with that we can throw ourselves back into the on-the-ground conservation action. We won the RCI Nature Conservation Award and, because we centralized hand-rearing this season, we reached a 100% success rate in rearing with all of the harvested chicks, from both wild nests and captive pairs, being raised successfully. We successfully reinstated tattooing as a safe method of permanently marking birds that are part of the management programme. We were able to retrieve an escaped ground-hornbill for a captive facility in Pretoria. The first steps towards the hand-rearing centre were taken with nine birds being moved to alternate holding aviaries and, with the next few reintroductions clearing the aviaries, we will be able to begin construction.

Executant: Lucy Kemp  
Mabula Ground-Hornbill Project  
(016-183 NPO & 13/00/00/723 PBO)

## MISSION STATEMENT

The Mabula Ground Hornbill Project strives to halt and then reverse the decline of the Southern Ground-Hornbill. Our work is done in a multi-disciplinary, multi-pronged approach to ensure that, for such a long-lived and slow breeding species, we are able to make an impact as quickly as possible.

## HIGHLIGHTS OF THE PAST SIX MONTHS

### AWARD NOMINATION

We won the RCI Nature Conservation award at a lavish affair at Sun City for the 2017 Oscas and would like to thank Mabula Timeshare for the nomination. We acknowledged clearly though that ground-hornbill conservation is a team effort that includes all our partners and collaborators, so this is for all of us.



We would not have been able to recapture him without the inflow of sighting information from concerned citizens – thank you!

### SUCCESSFUL RECOVERY OF AN ESCAPED GROUND-HORNBILL

A wild Tanzanian male escaped from a captive facility in Pretoria on the 30 December 2016. He was first seen roaming around the Skuilkraans Koppies area near the facility he escaped from, where our team attempted to re-capture him, but they were unsuccessful as he was extremely skittish. He then spent several weeks moving up and down the Moreleta river drainage line within suburbia before moving east towards the Shere community. He spent much time here moving through several private properties. He was hunting expertly with reports of him taking a full grown hare and also several domestic fowl chicks. Increasingly there was concern about pets in the area being preyed upon (probably rightly so) and we are glad he is now safely in an aviary at Loskop Dam, where within minutes he began feeding some of last year's ground-hornbill chicks.

### 'Conservation biology and molecular ecology of the Southern Ground-Hornbill'

Lucy Kemp has completed her PhD investigation of several aspects of the conservation biology of the species, with a focus on reintroductions and the genetic health of the global population. The thesis was accepted and she graduates in June. We will now ensure that this work is published and the new empirical data will be included in the next Population and Habitat Viability Analysis. It was a massive collaborative effort and she thanks each and every individual that shared data, insights and support throughout the project. She would also like to thank all of our supporters who were patient when she was not always able to reply to correspondence immediately, especially in the final stages of writing up. She will share the genetic results with all the contributing institutions as soon as the work has been peer-reviewed.



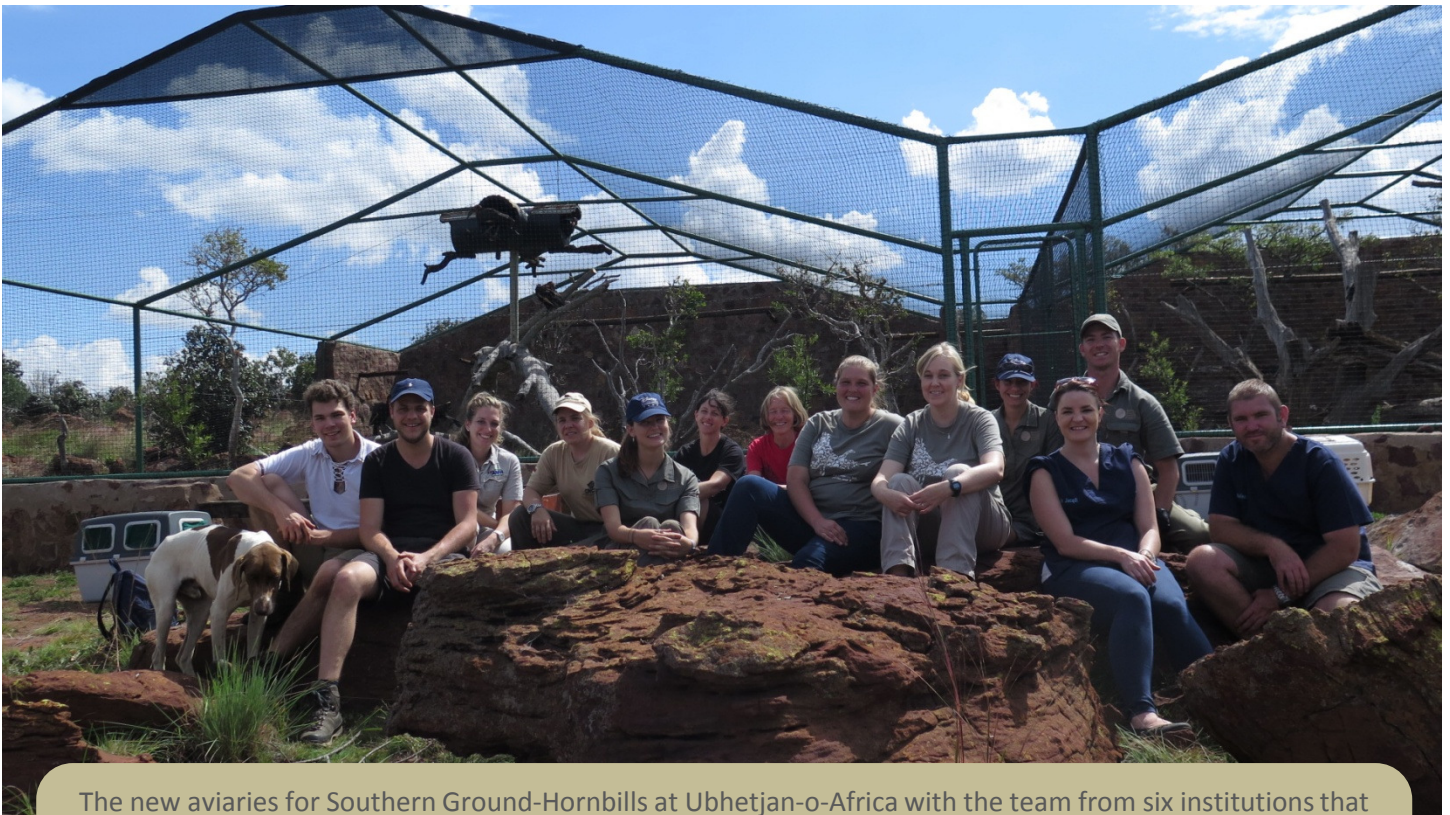
**Annual harvest of doomed second-hatched chicks:** This year was a record-breaker with nine very healthy juveniles now available for the conservation programme. Four chicks were harvested from the Associated Private Nature Reserve (in close collaboration with the Percy FitzPatrick Institute) and reared by Delecia Gunn. A further five captive bred chicks were also reared, two from the pairs at Loskop Dam Nature Reserve and three that were partly reared by Joanne Meyer at Montecasino Bird Gardens and then transported to Loskop to ensure that the chicks received the best possible socialisation. Every one of these chicks are still alive and the young males are being prepared for inclusion in four bush-schools.



Delecia Gunn  
Mpumalanga Tourism and Parks Agency

**Annual nest surveys:** Aside from working in the APNR we also conducted the nest surveys in the Limpopo River Valley and Sabi Sands. Due to the excellent rains this year the productivity of the thunder birds was good and we also tested blood lead levels on the Limpopo River Valley chicks. Sabi Sands is happy with the artificial nest progress and we will initiate installation in time for the upcoming 2017-18 summer season.

**Nthabiseng Monama graduated with a diploma in Nature Conservation from UNISA**



The new aviaries for Southern Ground-Hornbills at Ubhetjan-o-Africa with the team from six institutions that worked together like a well-oiled machine to process a total of 19 birds (blood samples, ringing, measurements, rings, microchips and tattoos and then moved nine of those birds to their new aviaries (below). These are now being used as temporary housing while the Baobab hand-rearing centre is constructed and will then hold two of the captive-breeding pairs.

## TATTOOS

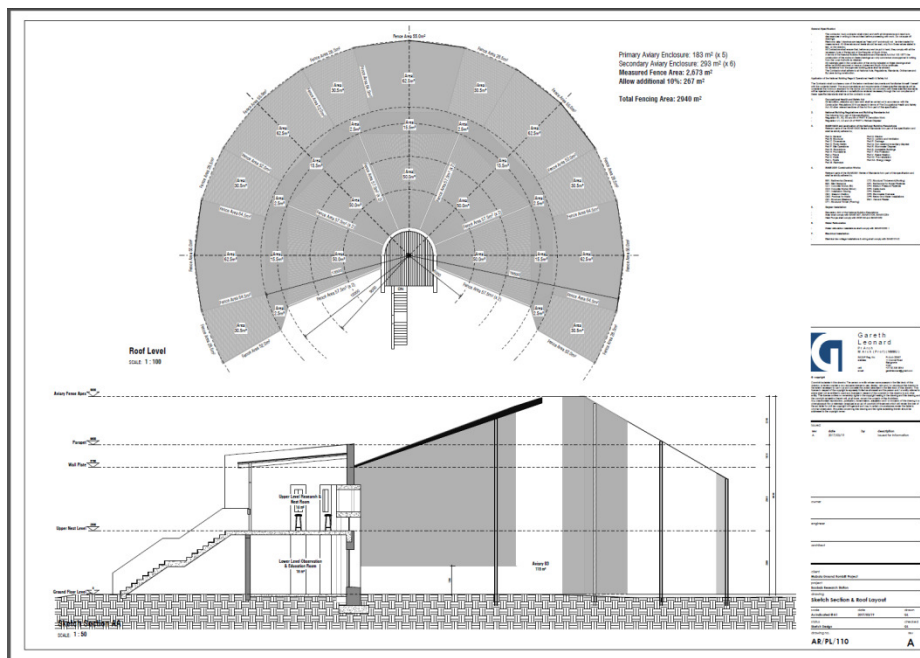


With the experts from 7<sup>th</sup> Street Handstyle Tattoos we were able to mark nineteen individuals with a code on the bare skin at the base of the lower mandible. This subtle tattoo is barely visible to the naked eye from a distance and is used for permanent marking. This was a controlled test to see if this is possible for marking wild birds safely and quickly without the lifelong risk of using rings.

## PROGRESS ON THE BAOBAB HAND-REARING FACILITY AT LOSKOP DAM

### Ready to go!

The plans are completed and the funding for the hornbill-related components of Phase I is safely in the bank and so now we can begin.



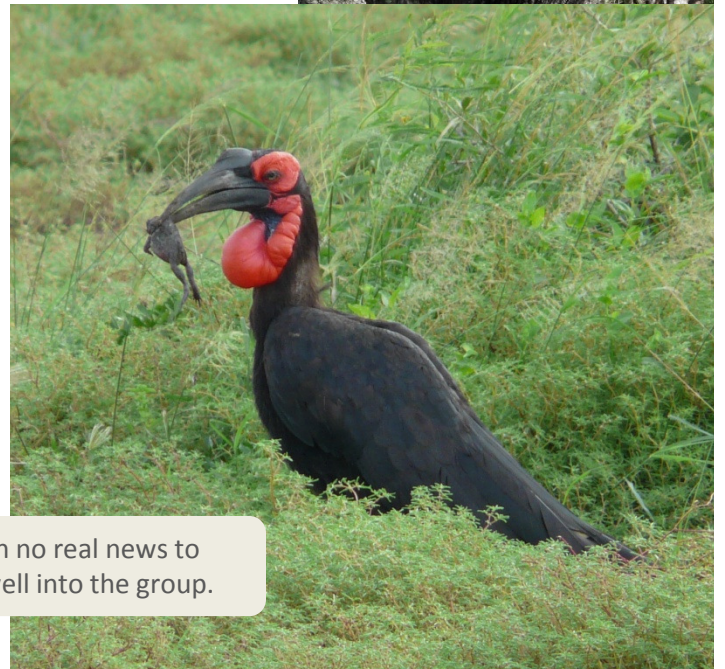
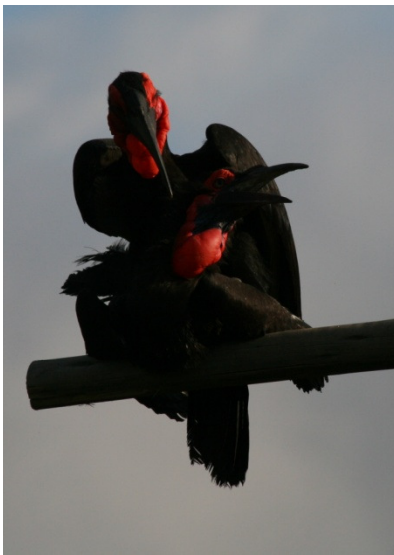
## NEWS FROM RELEASE SITES



The **Loskop Nature Reserve** bush-school is also doing well. The birds found and utilized the artificial nest that was prepared as the very first trial prototype. However, their investigations led to them smashing through the floor and so a replacement nest (the improved prototype) was installed. A new monitor Meshack Mogodi has joined the team and has received his first aid training.



Sadly, This breeding season at **Mabula** did not see a breeding attempt despite much time spent in the nest and copulation repeatedly observed. The group of four though still goes from strength to strength.



**Elandsberg:** This release site is in an advanced stage of planning and will come on line within the next month. The land-owners and management are extremely supportive.

The bush-school at **Thaba Tholo** is also doing well with no real news to report. The youngest group member has integrated well into the group.

## LOWLIGHTS OF THE PAST SIX MONTHS

Both of our Zimbabwean Conservation Interns had to leave to return home once their visas had expired. We wish them both well in their endeavors and thank them for their immense value to the project. Patience will thankfully still remain as a research associate as she completes her MSc on ground-hornbills in Zimbabwe and we will do all we can to support her.

# ACTIVE THREAT MITIGATION

**Loss of nests:** We continue working on nest prototypes for testing in the 2017-2018 breeding season.

**Local trade:** We have partnered with sangoma Nokulinda Mkhize for the best avenues to address local trade for traditional medicine and ritual purposes.

**Electrocution;** Working with ESKOM another transformer system has been protected.



## PLANS FOR THE NEXT SIX MONTHS

- International Hornbill Conference 2017 (Kuching, Sarawak) where we will present two papers and two posters.
- 
- Build the Baobab Hand-rearing centre. This will begin with the predator-fencing around the perimeter to secure the site and staff accommodation refurbished before embarking on the hand-rearing centre and aviaries.
- Complete Prototype II artificial nest.
- Build a helibox for the transportation of chicks by helicopter.
- Release three young males into bush-schools.
- Release entire new group onto Elandsberg.
- Prepare several research manuscripts for publication

# EDUCATION & AWARENESS OVER THE PAST SIX MONTHS

\*all sponsors and collaborators are acknowledged in presentations and reports

**Print media:** SANParks newspaper article, TUT Industrial Designs newsletter article, article in the Middleburg Post.

## **Online:**

- Facebook, Twitter, Youtube, we are also currently redoing our website
- We circulated a newsletter in February
- Article on the Identipet website

## **Presentations, meetings and workshops:**

- Weekly awareness game drives to view the birds at Mabula Private Game Reserve
- Weekly awareness presentation to guests at Mabula
- Vaal Dam Bird Club
- Workshop: lead ammunition: Impala Bullets and BirdLife SA

## **Land Owner & Community Engagement:**

### **Our reach with the youth:**

40 students from Itireleng Secondary School visit.  
28 Grade 6 – 8 students from Thabakhubedu Primary School.

### **Community outreach:**

• Site visit for Johannes Mokajiwe with husbandry training at both Johannesburg Zoo and Mabula Private Game Reserve to assist him in his role as carer and monitor for one of the bush-schools.

### **Other:**

Montecasino Environmental Day





# SUMMARY FINANCIAL REPORT: SUSTAINABLE

The Mabula Ground Hornbill Project has one bank account from which we manage our running expenses. The hand-rearing facility funds are kept in a linked high interest account until we are ready to break ground. A detailed annual financial report is available on request.

## DETAILS OF SPONSORSHIP RECEIVED OVER THE LAST SIX MONTHS

### SPONSORSHIP RECEIVED OVER THE PAST SIX MONTHS

#### Major support: > R100 000

Disney Conservation Fund

Mabula Private Game Reserve

Virginia Zoological Society

Montecasino Bird Gardens

#### Contributing supporters:

American Association of Zookeepers

Artis Zoo

Birdlife Inkwazi

Evansville Zoological Society

Fund-raiser Lemonade Boys

In memory of Eberhard Schmidt

My Schools Programme

North Carolina Zoo Society

Sacramento Zoo

Tulsa Zoo

Vaaldam Bird Club

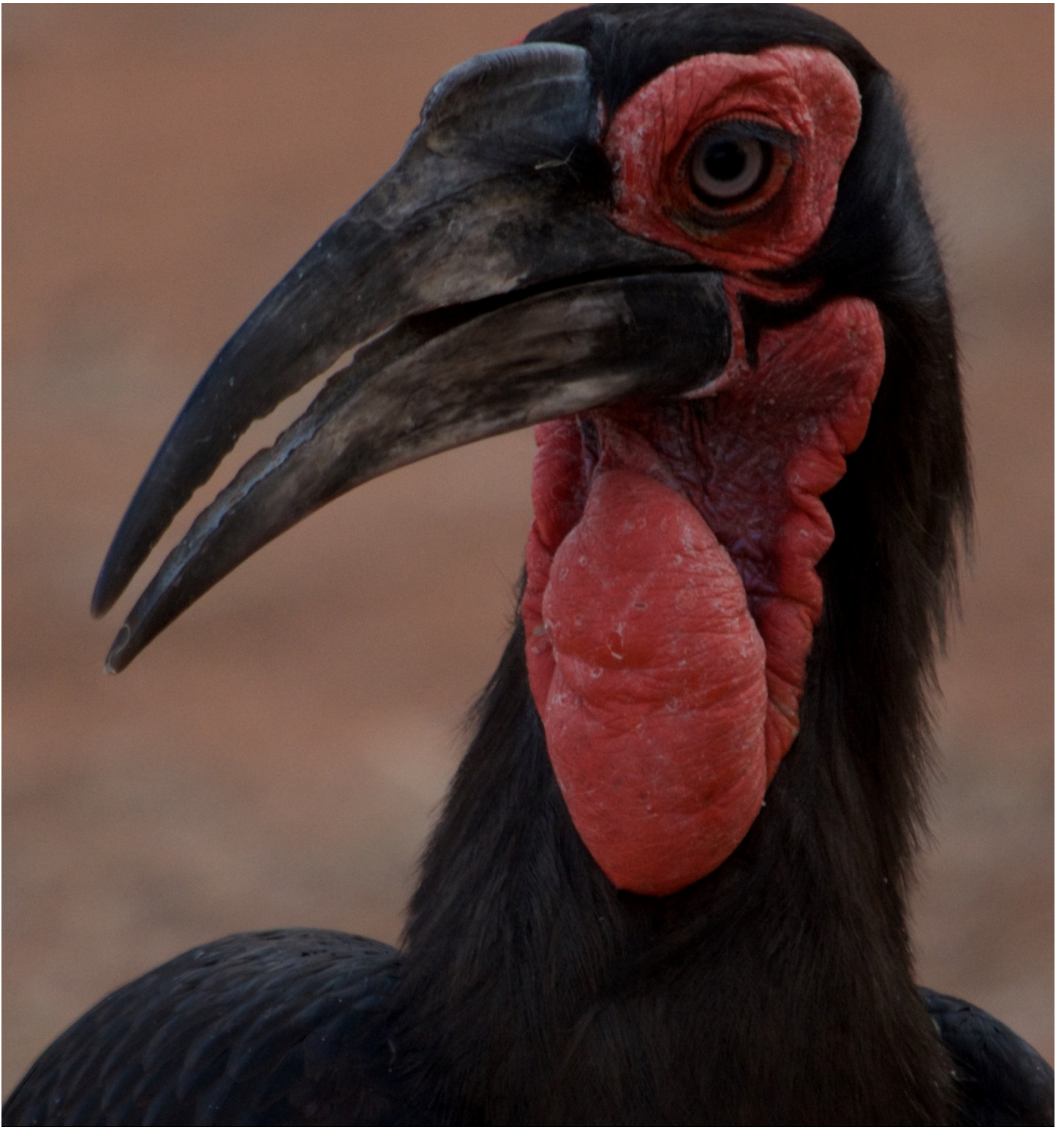
Val Kupferberg

Wildfriends Africa

## SUMMARY OF SOME OF THE ACTIVITIES OF OUR LOCAL COLLABORATORS AND PARTNERS:

National Zoological Gardens of South Africa	Manages the PAAZA African Preservation Programme captive propagation programme, provides post-mortem support, nutritional & behavioural advice and undertakes all genetic analyses at their state-of-the-art laboratory.
Percy FitzPatrick Institute of African Ornithology	Undertakes APNR harvest, wild capture, research into spatial use of habitats and dispersal.
Mpumalanga Tourism and Parks Agency	MTPA is our partner on the hand-rearing centre, providing the land and logistical support. Delecia Gunn rears harvested chicks, continues education and awareness, and acts as the main advisor on hand-rearing and captive socialisation.
Johannesburg Zoo	Hosts captive birds, rearing harvested chicks, grow rearing capacity, continued education and awareness.
Endangered Wildlife Trust	Undertakes nest monitoring, harvest and ringing of fledglings in Kruger National Park, research into habitat use & dispersal.
Montecasino Bird Gardens	Hosts two breeding pairs, awareness campaign, fund-raising support, rears both harvested and captive-bred chicks.
Bester Birds	Hosts birds for the captive breeding programme.
Umgeni River Bird Park	Hosts a pair for captive breeding and is increasing awareness in KwaZulu-Natal.
Boscia Birds	Hosts a captive pair and young birds, and hand-rears harvested chicks.
Zaagkuilsdrift Bird Sanctuary	Hosts birds for the captive breeding programme.
Lory Park Zoo	Hosts birds for the captive breeding programme.
Hoedspruit Endangered Species Centre	Hosts birds for the captive breeding programme and provided a wild female for a release.
University of Pretoria Veterinary Facility, Onderstepoort	Provides veterinary care and advice, vaccine development and research support.
Deltamune	Provides vaccine development and provision and assist when a BLS 3 facility is required for inactivation of blood samples.
Ubhetjan-o-Africa	Hosts birds for the captive breeding programme and assists with education.





Without your support this project could not be

**THANK YOU**

To see all our partners click [here](#).