

# Mabula Ground Hornbill Project

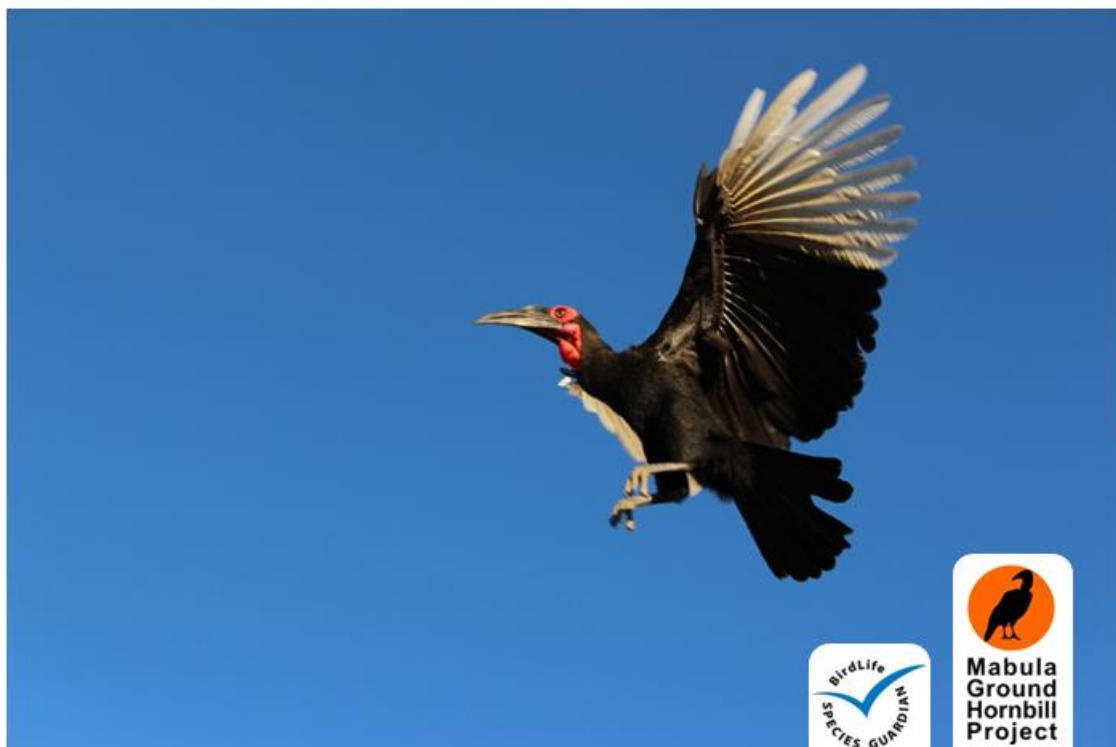
## Progress Report

**Reporting Period: April 2013 – September 2013**

**Summary:** The last six months have been focused on one of our five primary objectives – increasing awareness in the areas where hornbills occur or where reintroductions are pending. Our education programme is now in operation and we have employed a full-time environmental educator with Nthabiseng Monama joining the team. Our various research projects are developing well and one that has sparked a lot of interest was a preliminary investigation into the extent and reasons for the decline of this species in northern Zululand. This still requires additional work but has led to a number of land owners coming forward inquiring how they can assist in keeping and promoting the species on their properties.

Executant: Lucy Kemp

**The Mabula Ground Hornbill Research & Conservation Project**  
(016-183 NPO)



Note to Rufford Small Grants: This is a simple word version of our progress report. Please see <http://www.ground-hornbill.org.za/progress.html> for the full colour version.

## Highlights from the last six months (and a few lowlights):

**International Hornbill Conference: Manila, Philippines:** We presented a paper at the Conference on the harvest and rearing for release or captive breeding for Ground-Hornbills as a potential model for other hornbill species that exhibit the same obligate brood-reduction. It was an amazing networking opportunity to be exposed to the work the Asian hornbill specialists are involved in, particularly in terms of applied ecological research, education and conservation action. We also met with the Conservation staff at Singapore Zoo and a field trip to see the successful artificial nest box programme they have on the island for Oriental Pied Hornbills.

**Successful nomination:** We nominated Delecia Gunn, Mpumalanga Tourism and Parks Agency, for the PAAZAB Conservation Award and she won! This was well deserved since she has been rearing Ground-Hornbill chicks since 1996 and has made the majority contribution to the successful hand-rearing protocol, now in use around the world.

**New vehicles:** No longer is the project able to only be in one place at one time with the addition of two new vehicles. Our Mazda 4x4 engine seized leaving Natasha stranded on the side of the highway and Imperial Truck Rental came charging in like a knight on a white horse (well - a white Isuzu 2.5l diesel delight) and Natural Encounters and Malcolm Cumming and family enabled the purchase of a Nissan NP200. This will greatly expand our capabilities, relieve a lot of stress and the Project can grow accordingly.

**Section 18a:** We are now a Section 18a Project which means that South African sponsors can claim a percentage of their income tax back from SARS. This makes it much more attractive to new sponsors and will help ease the load for current sponsors.

**Education Programme:** Our new education programme, freely available on the website ([www.ground-hornbill.org.za/education](http://www.ground-hornbill.org.za/education)), is now in operation and school children are enjoying the activities. As we have only recently implemented this educational program, it is in the monitoring phase before we embark on a more national distribution. This is to ensure that correct information is carried over to the youth, particularly in rural areas within Ground-Hornbill distribution, and to monitor the effect the programme has on changing perceptions. We will be able to adjust the programme accordingly. Our new projector from Idea Wild allows us to host 'hornbill movie nights' showing a selection of hornbill documentaries and the brilliant '*Adventures in Zambesia*' a fully African animation about African birds. Nthabiseng Monama will be leading the programme in her role as environmental educator. We still firmly believe that the birds have little chance of survival if the people who share their habitat know nothing about them, their importance (both ecologically and culturally), and their plight.

**Online library:** We are pleased to announce that all papers and reports published on the species are available on our website under the Library tab. We have done this to make the primary literature more easily available for anyone needing it. Please let us know if anything is missing.

**Field Trip for the hand-rearers:** We hosted most of the hand-rearers on a fieldtrip to the Associated Private Nature Reserves to see wild hornbills and to have the opportunity to look at both natural and artificial nests. The Percy FitzPatrick SGH Project, through Kate & Cassie Carstens, assisted with guiding them to the sites and groups and they were hosted in style at one of the lodges (Angela's Camp).

**Zululand report:** we circulated our initial report widely on the extent of the decline and proposed reasons for the decline and had a number of positive responses with new ideas, insights and data from conservation managers and ecologists who know the area well. We have taken this into account and will be undertaking an aerial census in October over the study area to ground-truth the sighting records. The initial analysis has shown a very frightening picture with reports of just five birds left in the whole of northern Zululand. This has highlighted the importance of the Melmoth population and we will be focusing our efforts there to start mitigating for threats and increasing awareness.

#### **Releases update:**

**Madikwe:** The Madikwe birds continue to roam the Botswana border. After months of travelling up and down the Marico River they have settled across five farms. They have survived their first winter without supplementary feed. One bird died due to extensive competitive food displacement that eventually led to its demise - this being a large learning moment for the team and the remaining bird has been moved back to Loskop until we have reassessed what is the best course of action for the site. More checks and balances will need to be put in place before the next attempt.

**Mabula:** The group has had an interesting few months. The female that was reintroduced to the group in November took a full four months to integrate into the group. She had no contact for the first month and then started a prolonged negotiation with the group. Once she was accepted she was then brought by the alpha male to the nest. There was good courtship behaviour and it was marvellous to see the group as a complete unit. A freak storm in April however ended this with a falling branch killing her at night at one of their favourite fig tree roost sites.

We are in the process of reintroducing a new female and Kingfisher's son, Mokaikai. Mokaikai was immediately integrated into the group which seems to be the norm for young males. The female however appears to be on the same path as the previous female – now exploring the far extremes of the territory.

#### **Pending releases:**

**Thabazimbi release:** After two failed attempts to secure a sub-adult male to be the leader for this group we will try again in the last two weeks of September. This appears to be important to the ultimate survival of a group and we need to urgently test this.

**Craft development:** As a conservation intervention our craft initiative is growing. The Project is already able to provide steady income to two crafters in the Mabula area and we are growing this to other reintroduction sites. We are using Fair Trade principles in the development of this initiative and so crafters are paid fair prices and the materials used are sustainably sourced. The quant seed birds and beautiful wooden bowls (all Jacaranda wood so entirely sustainable as this is an exotic species in South Africa) are the start of a growing enterprise.

## THREAT MITIGATION

**Electrocution:** We have assurances now that all transformers in the Greater Kruger Park will be covered – this leaves half the country’s population safe from this threat.

**Poisoning:** Several more poison reports from KwaZulu-Natal is showing this to be the single greatest known threat to the species and so we are thrilled that Dr Gerhard Verdoorn will be facilitating a workshop for us so that we can try and best understand the problem and thus start to work on solutions.

**Disease:** Dr Katja Koepfel continues to develop the Newcastle’s Disease vaccine and the efficacy is positive.

**Window-breaking:** We continue to look for an alternative to the Contravision that limits the reflection of the birds in the window and, as such, prevents window breaking. However, the aesthetics of game lodges are somewhat compromised and therefore the use of this product is limited.

## What is planned for the next six months:

**Nest Checks:** We are ready and waiting to start the annual nest checking in the Limpopo Valley as soon as the first rains come. Courtesy of our new vehicle we will this year be able to extend this to KwaZulu-Natal for the first time. This will allow us to expand the harvest to include birds that will give us a wider genetic diversity and allow us to monitor more nests for breeding success in non-protected areas.

**KZN surveys:** We are flying an aerial census over the area of our northern Zululand study area to ground-truth the sighting records.

## RELEASES:

**Thabazimbi Release Site:** The birds are in the release boma and will be released within the month.

**Loskop Dam Release Site:** The boma is complete and this release is imminent.

**Boma:** Rebuild the Mabula boma.

**Mobile Boma:** Find funding for the construction of a mobile boma that can be erected at release sites, negating the need for the expensive current permanent bomas.

**Testing new tracking device:** We are working with Ben Hoffman and Wireless Wildlife, to develop a tracking device that can be tail mounted – thus removing any risk to the bird other than the initial handling. This test will be conducted shortly and the results presented in the next progress report.

**New sites:** Site visits to potential new sites across the Limpopo Province.

**FGASA:** Present on-going lectures to FGASA (Field Guide Association of South Africa) students.

**Craft:** Continue to develop our craft initiative as a way of increasing awareness and raising funds.

**Papers:** We are working on three scientific papers for publication and hope to have one complete within the next six months.

## AWARENESS GENERATION IN THE LAST SIX MONTHS

**Education & Awareness\***(all sponsors and collaborators are acknowledged in presentations and reports)

**Magazines:** African BirdLife; Skyways; IAATE journal; African Adventures

**Newspaper articles:** Cape Argus ; Natal Mercury; Limpopo Mirror

**Online:** Facebook; Khaki Fever

**Newsletters:** July Boom-in-the-Bushveld

**Fieldtrips:** hand-rearers to APNR; Iterileng High School to Mabula

**Presentations:** International Hornbill Conference; Polokwane Bird Club; President's Ridge Bird Club; Sandton Bird Club; Weekly Modjadji Tea talks and Hornbill Drives: Mabula Private Game Reserve; two schools in the Loskop area.

**Other:** Hosting journalists at Mabula; SASOL Birdfair; NZG Science Day

## FINANCIAL STATE OF THE PROJECT: SUSTAINABLE & GROWING

We are extremely grateful for all the sponsorship and support that we received in the last six months as this Project is finally able to grow now (see Table 2 for details). It meant that we are able to offer our staff contracts longer than a year, thus making it easier to build good capacity.

**PLEASE NOTE:** We have now met the requirements for a Section 18a NPO and as such a percentage of any new monetary donations to the project are tax deductible. Please contact us for more information.

**Table 2: Details of sponsorship and staff developments.**

sponsorship	staff
<p><b>Primary:</b>            SASOL Ltd.            Mabula Private Game Reserve            Seaworld &amp; Busch Gardens            Natural Encounters            Malcolm Cumming &amp; family</p> <p><b>Contributing:</b>            African Bird Club            Beauval Nature            Sacramento Zoo            Honolulu Zoological Society            Val Kupferberg</p> <p><b>In-Kind:</b>  <i>Vehicle:</i> Imperial Truck Rental</p>	<p>Nthabiseng Monama joins the team as Environmental Educator.</p> <p><b>Interns:</b>  <b>Alon Cassidy</b> helped us with general field work, photography and a brilliant sense of humour.</p> <p><b>Peter Hamming</b> assisted with field work and presentations (and is <i>the</i> guy with the first confirmed sighting of a spotted creeper in South Africa at Mabula).</p>

### Summary of the work of our partners and collaborators

<b>National Zoological Gardens</b>	Maintains the stud book and captive propagation programme, post-mortems, nutritional & behavioural advice and undertakes all genetics work.
<b>Percy FitzPatrick Institute of African Ornithology</b>	Undertakes APNR harvest, wild capture, research into spatial use of habitats and dispersal.
<b>Mpumalanga Tourism and Parks Agency</b>	Delecia Gunn rears harvested chicks, continues education and awareness and acts as the main advisor on hand-rearing and captive socialisation.
<b>Johannesburg Zoo</b>	Hosts captive birds; hand-rearing harvested chicks; growing hand-rearing capacity; continued education and awareness; veterinary support; vaccine development.
<b>North West University</b>	Research into tools for selecting reintroduction sites and social/human aspects of the conservation of the species.
<b>Endangered Wildlife Trust</b>	Undertakes nest monitoring, harvest and ringing of fledglings in Kruger National Park, research into habitat use & dispersal.

<b>Montecasino Bird Gardens</b>	Hosts two pairs of breeding pairs; awareness campaign; rearing both harvested and captive-bred chicks.
<b>Umgeni Bird Park</b>	Hosts a pair for captive breeding which successfully laid two eggs this season and is increasing awareness in KwaZulu-Natal.
<b>Boscia Birds</b>	Host captive pair and young birds and hand-rear harvested chicks.
<b>Zaagkuilsdrift Bird Sanctuary</b>	Hosts birds for the captive breeding programme.
<b>Lory Park Zoo</b>	Hosts birds for the captive breeding programme.
<b>Hoedspruit Endangered Species Centre</b>	Hosts birds for the captive breeding programme.