





## GOALS

- Protect at least 3 endangered land or marine species
- 2 Actively manage wildlife population for biodiversity
- 3 Supporting wildlife conservation education

# Care of the Wildlife



Thirty years ago, &Beyond Phinda Private Game Reserve was taking shape through an intensive process of wildlife translocations, reintroductions and land management.

Today it is one of our biggest conservation successes. Not only is it an internationally acclaimed Big Five destination, but Phinda's genetically-strong rhino, elephant, lion, and cheetah have boosted wildlife populations in other African reserves and even, in the case of lion, reversed a 15-year local extinction in Rwanda.

Taking a close look at the last four years of our Care of the Wildlife impact, it is appropriate that we consider the unexpected changes that 2020 dealt us.

This perspective gives context to the last three years, and allows us to celebrate achievements like the breeding success of Rhino Without Borders' translocated rhino in Botswana – over 50 calves being born – and the successful reintroduction of the pangolin onto &Beyond Phinda Private Game Reserve.

Back in 1980, when I started out in conservation, the world's population had exceeded the four billion mark and we needed to spring into action to save our wildlife and wild places.

Today, the global population is edging eight billion people – that means that in my conservation career of only 40 years, the world's population has doubled and the impacts on the planet are now profound. My understanding of the real challenge was brought into focus in 1991 when we started to view conservation as having three pillars: Care of the Land, Care of the Wildlife, and, most importantly, Care of the People. Our founders recognised, even then, that we needed to make conservation areas socially relevant, economically viable and ecologically sustainable.

I am truly astounded at how well our conservation teams have managed to minimise the impact of COVID-19 on our conservation achievements. The Care of the Wildlife successes of this chapter have been achieved against all odds and despite the challenges of a global pandemic.

After 30 years of conservation endeavours and learnings, it's clear that sustainability is a process and not an event.

Les Carlisle &BEYOND GROUP CONSERVATION MANAGER & RHINOS WITHOUT BORDERS PROJECT MANAGER



goal ]

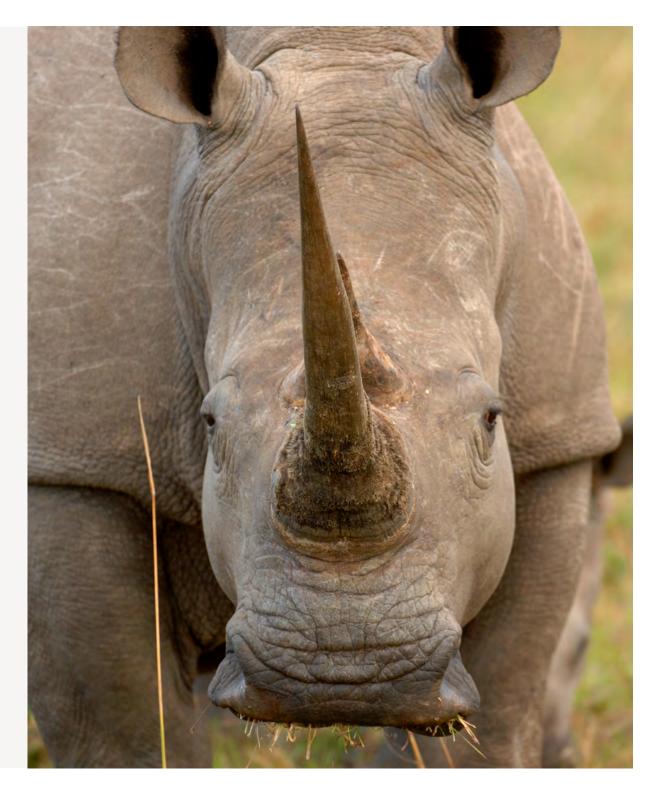
## Protect at least 3 endangered species

As a pioneer in responsible and sustainable tourism, &Beyond's model of restoring and conserving regional biodiversity has often required animal relocations and reintroductions.

In addition to this, a strong foundation of research and monitoring has allowed us to positively impact a number of species that are threatened or endangered.

To a large extent, the species which we chose to actively protect as part of our Vision 2020 goals, were selected based on the severity of the threats they are facing, together with location.

From 2004-2020: a total of 269 rhinos notched by our Phinda Conservation Team on the conservancy



#### **BEYOND** GROUP IMPACT REVIEW | VISION 2020 | CARE OF THE WILDLIFE

#### GOAL

#### 1.1 RHINO

	HINOS     WITHOUT BORDERS	WWF	PHINDA RHINO
20 20 VISION 2020	Translocate 100 rhino to a safer, protected Botswana destination	Support WWF-Black Rhino Range Expansion Project (BRREP) with further translocations	Continue to notch and de-horn / trim rhino horns Increase security through the use of digital systems Regular deception testing for all security staff
FY 2020 ACHIEVEMENTS	Continuation in the remarkable rate of calving – every rhino calf has now produced at least one calf, and in some cases two since their translocation In response to poaching incidents over this last year, the initiative's full monitoring resources, in close collaboration with the DWNP and Botswana Defence Force, have moved from further translocations, to the active monitoring and security of the 93 translocated rhino and their progeny	<ul> <li>4 births; 1 loss</li> <li>2 EKZNW (Ezemvelo KZN Wildlife) progeny successfully translocated to Malawi</li> </ul>	<ul> <li>8 white rhino notched</li> <li>8 white rhino dehorned</li> <li>16 white rhino trimmed</li> <li>3 black rhino notched</li> <li>3 black rhino dehorned</li> <li>4 black rhino trimmed</li> <li>2 white rhino translocated to Babanango, KZN</li> <li>17 recorded white rhino births</li> <li>5 white rhino losses</li> <li>Imported all historical data into improved central data capture system</li> <li>Efficiency of rhino monitoring continues to improve with more records being collected year-on-year, thanks to increased efforts on the ground and the incorporation of improved technologies</li> </ul>

## Learnings

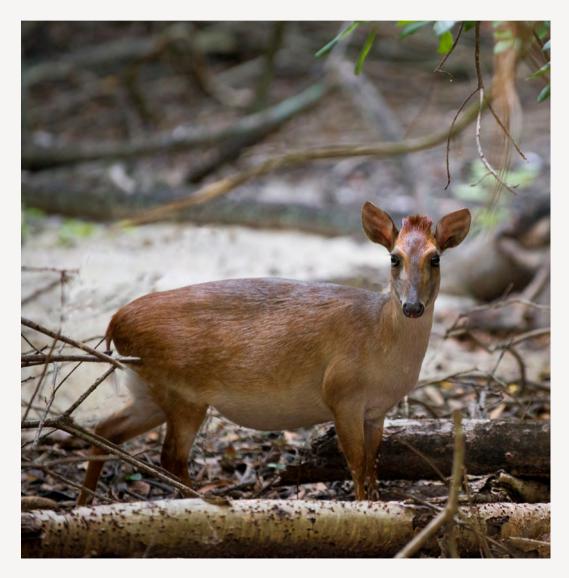
**Site selection:** our Rhinos Without Borders project has provided confirmation of the importance of release site selection to the breeding success of the new source populations. Our thanks to the Botswana Department of Wildlife and National Parks (DWNP) for their excellent site choices.

**Phinda dehorning:** every adult, reproductive white rhino cow has conceived and given birth since dehorning started in 2016: a proof point that dehorning has no impact on reproduction and fecundity.

Phinda tagging: with regards to rhino tagging methods, we have established that foot collars are not the safest attachment method to track rhino. In addition, using a new-design ear tag retention has improved, but no further ear tags will be deployed until a more feasible attachment method has been developed.

Phinda conservation: maintaining high security initiatives, together with a sustained dehorning programme, well-structured research and the critical support and engagement from the reserve's neighbouring communities, are all key to the success of rhino conservation on Phinda.

#### 1.2 ADERS' DUIKER & SUNI ANTELOPE



#### Aders' Duiker



Implement a management plan for the Aders' duiker population on &Beyond Mnemba Island based on the results of the PhD research



The results of the PhD research into the Aders' duiker population management plan are imminent

FY 2020 ACHIEVEMENTS A full Aders' duiker tagging exercise was planned for April 2020, but due to COVID-19 restrictions, has had to be postponed to April 2021, at which point we will also do a DNA sampling



Work with the government in Zanzibar to create new insurance populations to reverse the potential for local extinction on the main island



Discussions continue with the Zanzibar Government Conservation Authority regarding the possibility of a secure area to establish another breeding population, potentially in the Jozani National Park

Zanzibar's Department of the Environment has given us provisional approval to accelerate our forest rehabilitation programme

#### Suni Antelope



Continue suni DNA research on &Beyond Mnemba Island, &Beyond Phinda, and also on &Beyond Benguerra Island, where a suni population has now been identified

#### **VISION 2020**



FY 2020

ACHIEVEMENTS

#### &BEYOND MNEMBA

A recount of the suni relocated in 2017 was planned, but had to be postponed due to COVID-19 restrictions

#### &BEYOND PHINDA

Identified research areas in partnership with NPO Wild Tomorrow Fund and Biologists Without Borders include:

- Vegetation structural analysis that will allow us to quantify habitat utilisation and to get population estimates using relative species abundance models
- Intensive camera trapping to monitor the drivers behind suni presence
- Funding for the completion of the suni GMR (Genetic Mark Recapture) analysis. Genetic results will determine accurate densities of suni

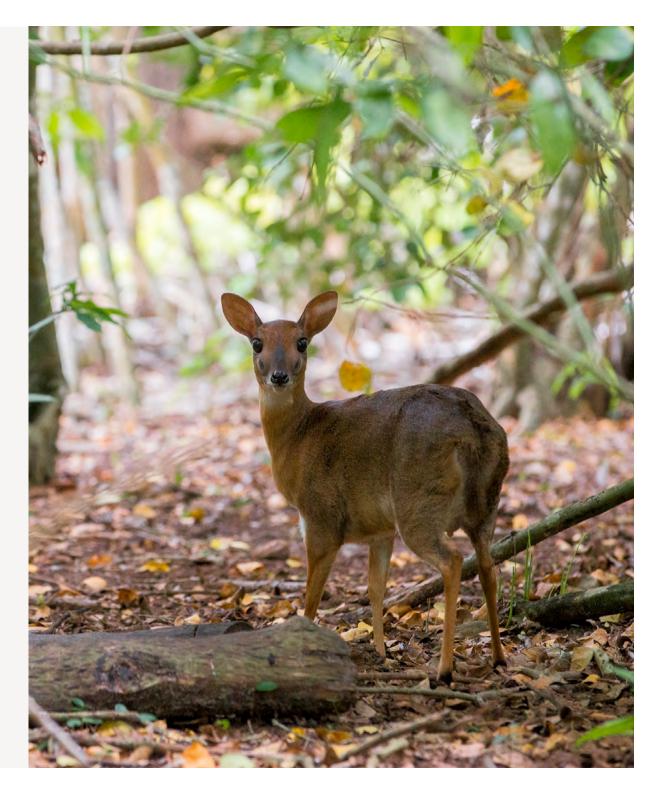
#### **&BEYOND BENGUERRA**

Pending progress on the above



Introduce learnings from &Beyond Phinda and &Beyond Mnemba Island to create a protected environment for the suni on &Beyond Benguerra Island

No progress in 2020



#### GOAL

#### CHEETAH 1.3

The cheetah population on &Beyond Phinda has been classified as the most important on fenced reserves in Southern Africa (excluding the Kruger National Park).

Phinda's cheetah are in high demand to restock or develop new populations elsewhere. This status brings with it the responsibility to ensure their optimal condition and genetic integrity.

In line with this, Phinda's population is actively managed with interventions where needed. They are one of the most intensively monitored and researched cheetah population in South Africa, and this data has contributed significantly to the understanding of this magnificent, but endangered species.

#### Impact in numbers:



Percentage of cubs that have reached independence



Current & Beyond Phinda population

Cheetah have been translocated since reintroduction began

#### Cheetah



Maximise the growth of the secured cheetah population on &Beyond Phinda Private Game Reserve by:

1. Actively managing other large predator numbers, and controlling bush encroachment to provide more suitable habitat for cheetah

- 2. Enabling human intervention, such as veterinary care, to maintain population numbers:
- 2 new males brought in from the neighbouring Manyoni Private Game Reserve in June
- Bonded 2 single males in the boma from Dec to Jan; released as a coalition in Feb
- 2 orphaned males put in the boma from Sep to Nov 2019 until fully recovered from injuries sustained from fight with dominant males
- 3. Providing cheetah to help restock other areas of South Africa and further afield in Africa
- 1 cheetah translocated during FY 2020

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## The total number of recorded cheetah monitoring locations rose from 185 in 2017 to 1 109 in 2019.

Thanks to the additional support our reserve monitoring staff received from our Phinda guiding teams using our new Beyond the Sighting data capture system.

#### GOAL

#### 1.4 SEA TURTLE

As an iconic species, sea turtles are an important indicator of the health of our oceans and beaches.

Our sea turtle nest monitoring programmes on both &Beyond Mnemba and Vamizi Islands are approaching significant anniversaries. Early 2021 marks 20 years of continuous nest monitoring for the Mnemba programme, while Vamizi celebrates the same landmark in 2022.

These are some of the longest, continuously-running turtle nest monitoring programs in the Western Indian Ocean, and offer invaluable insights on the iconic and endangered species.

#### KEY DEVELOPMENTS

2020 has seen the following achievements in our turtle-nesting monitoring protocols and data collection management:

- Introduction of standard monitoring protocols using hand-held digital data collection devices, integrated with cloud-based databases for data management across Mnemba, Vamizi and Benguerra Islands
- Commencement of a detailed analysis of nearly 20 years of unbroken recorded turtle nest monitoring data on Mnemba and Vamizi Islands
- Introduction of sensor technology to monitor environmental conditions (e.g. temperature) around active turtle nests
- Securing of funding to initiate satellite telemetry studies of sea turtles in the Bazaruto Archipelago
- Commencement of a dedicated PhD dissertation project by Ms Gelica Inteca of Universidade Lúrio

## Two decades of turtle monitoring.

#### TURTLE NEST ACTIVITY MONITORING

Mnemba and Vamizi Islands host regionally important breeding sites for green (Endangered) and hawksbill (Critically Endangered) turtles.

MNEMBA ISLAND	Total nests	Successful emergence of hatchlings
2017	53	3 749
2018	16	829
2019	128	10 296
2020	18	1 087

VAMIZI ISLAND	Total nests	Successful emergence of hatchlings
2017	196	11 042
2018	109	9 951
2019	189	18 635
2020	175	5 084

Protecting all species of sea turtles has wide ranging implications for other marine species and habitats, and goes a long way to leaving our oceans a better place.



## PhD RESEARCH PROJECT

The wealth of turtle monitoring research collected over nearly two decades will be used as part of a PhD dissertation by Ms Gelica Inteca of Universidade Lúrio.

With increasing impacts from plastic pollution, beach erosion due to rising sea levels and storms, and the poaching of eggs and adult turtles for food, some of the important outcomes of this research will be to:

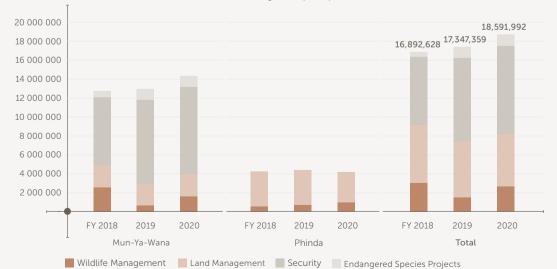
- Develop and refine protocols to improve the protection of nests against beach erosion
- Understand and mitigate the impacts of plastic pollution on turtle nesting success
- Document patterns of turtle movements after nesting events to gain an understanding of their habitat needs
- Work with local communities at each of our island sites to understand their perceptions and needs relating to the use and cultural significance of sea turtles
- Determine reasons for annual hatchling and nest variances

## Actively manage wildlife population for biodiversity

 Beyond Phinda is part of the Mun-Ya-Wana Conservancy – a collaboration of private and community land owners in the KwaZulu-Natal region surrounding
 Beyond Phinda Private Game Reserve.

The costs of managing the conservancy are shared in proportion to the amount of land contributed to this sector. With its owned and community-leased land, Phinda comprises 59%\* of this conservancy and our Phinda Conservation Team actively manage the entire reserve.

This vast tract of land – 28 622 hectares (70 726 acres)\* – includes not only the vegetation and species biodiversity of seven distinct habitats, but also 790 hectares (1 952 acres) of rare sand forest and a number of threatened species including rhino, cheetah, leopard, lion and pangolin. \*As at June 2020



Investment into conservation over 3 years (ZAR)

Phinda has contributed 36.52 million ZAR of the collaborative ZAR 52 million invested into the protection of the Mun-Ya-Wana Conservancy 13 076 Ha PHINDA PROPERTIES 1991 &Beyond Phinda Owned Land &Beyond Phinda Community Land Mun-Ya-Wana Member Land 28 622 Ha MUN-YA-WANA PROPERTIES 2020

#### **Conservation Project Updates**

#### MUN-YA-WANA CONSERVANCY SPOTTED HYENA PROJECT (MCSHP)

Aim: To determine the utilisation and preference of various land-use areas outside of the protected areas of Phinda and Mkuze by spotted hyenas.

- Total recorded population for the year as at 31 December 2019 was 7 individuals in 3 clans
- ii) The transmitted data from 9 hyenas collared with GSM/GPS/VHF drop-off collars has provided a wealth of research data covering their diet, denning habits and space and habitat use of the reserve
- iii) The primary database for this population is the spotted hyena ID kit, which uses their unique neck, leg and body spot patterns for identification

#### LEOPARD MONITORING

Following on the ten-year Mun-Ya-Wana leopard project, from 2002 to 2012, we have continued the active monitoring of the reserve's leopard populations through a series of camera-trap surveys conducted in 2014, 2016, 2017 and 2019.

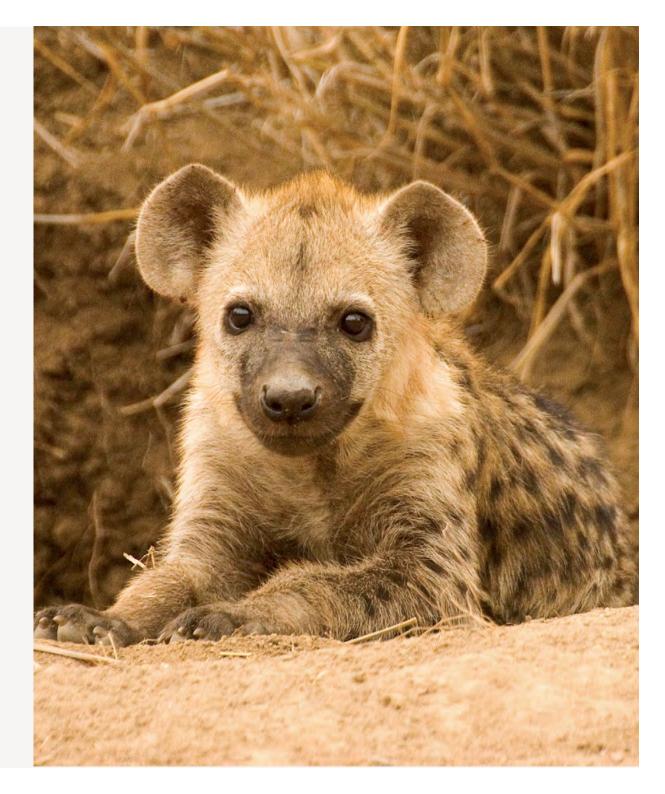
In addition, a wealth of data is now being generated through the development of our in-house Beyond the Sighting data capture system, which is being used on a daily basis by both our guide and field teams.

#### 2020 DEVELOPMENTS

Our 2020 implementation of a highly structured, legislation-compliant approach to our management of the reserve has culminated in the following:

- On 05 September 2019, the Mun-Ya-Wana Conservancy was officially gazetted as a protected nature reserve in terms of the National Environment Management: Protected Area Act, 2003 by the KwaZulu-Natal Department of Economic Development Tourism and Environmental Affairs.
- The formal approval of our Protected Area Management plan by Ms. Nomusa Dube-Ncube, MPL.\*
- The official acceptance of our Elephant Management Plan by Ezemvelo KZN Wildlife (EKZNW), approved and signed by Ms. Nomusa Dube-Ncube, MPL\*, for a further five years as per the prescribed norms and standards; this meets our Vision 2020 goal of an approved plan.
- Predator Management Plan updated and approved by the Mun-Ya-Wana Conservancy Management Authority

\*Member of the Provincial Legislature; Member of the Executive Council responsible for Environmental Affairs, KwaZulu-Natal Department of Tourism and Environmental Affairs.



#### 2.1 WILDLIFE CONSERVATION MANAGEMENT

	Game management	Elephant management
20 20 VISION 2020	Undertake an annual wildlife species census to determine animal numbers and required off-takes	Ensure the elephant numbers within the Mun-Ya- Wana Conservancy do not exceed carrying capacity levels identified in our
	Modify game species mix and numbers if they are found to be negatively impacting on biodiversity	formally approved Elephant Management plan
$\bigcirc$	Aerial and driven game counts were conducted in September and October 2019	Total estimated elephant population: 112 individuals
FY 2020 ACHIEVEMENTS	Count estimates for all large herbivores showed slight	3 recorded births; 1 natural mortality
	variances from 2018 to 2019: buffalo and nyala numbers were up, giraffe and impala slightly	No introductions or translocations
	down, with kudu and wildebeest remaining stable	3 new elephant collarings



## 2.2 LAND MANAGEMENT WITH REMOVAL OF INVASIVE WEEDS AND CONTROLLED BURNS



Undertake periodic rangeland assessments to determine management interventions – 5 year review

**VISION 2020** 

Land management



FY 2020 PROGRESS In addition to our annual veld-condition assessment, a total of 1 600 hectares (3 953 acres) of land was subject to bush clearing, and close to 3 000 hectares (7 413 acres) to alien plant control as part of our long-standing clearance programme



Alleviate herbivore pressure through the use of fire to draw wildlife into rested areas

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A total of 10 400 hectares were prescribed for burning to supply fresh grazing, control bush encroachment and remove alien plant species



# Supporting wildlife conservation education

More than

16 000

conservation

lessons given over

the past 3 yearas

Tomorrow's natural resources will stand a better chance of survival if today's children are inspired to conserve the Africa's precious wilderness areas.

The goal is to instill (in both children and adults) appreciation, respect and understanding of the natural resources that surround them.

For the full impact potential of the &Beyond model of Care of the Land, Wildlife and People to be realised, the support of the communities living alongside these wilderness areas is needed.

In this regard, conservation lessons aim not only to educate, but also to create a deeper awareness of the interdependence between preserving this biodiversity and the meaningful community benefits that come hand in hand with conservation.

#### Conservation lessons

YEAR	2018	2019	2020	Total
RSA: Phinda	3 111	1 435	1 226	5 772
RSA: Mpumalanga	63	64	0	127
Botswana	330	400	99	829
Namibia	143	64	0	207
Indian Ocean Islands	548	1 631	567	2 746
Tanzania	1 261	1 827	3 278	6 366
Kenya	157	203	202	562

# Disease serology

#### CHEETAH AND LION

Disease serology – blood tests to rule out the presence of debilitating feline diseases including FCoV (Feline Corona Virus), FELV (Feline Leukaemia) and FIV (Feline Immunodeficiency Virus) - in the lion and cheetah populations of the Mun-Ya-Wana Conservancy plays a crucial conservation role.

About one third of South Africa's cheetahs are managed under the Endangered Wildlife Trust's Cheetah Metapopulation Project and participating reserves, with the cheetah population at &Beyond Phinda being classified as the most important on fenced reserves in Southern Africa (excluding the Kruger National Park).

When lions were first reintroduced to the reserve, they were unconventionally drawn from mixed prides, which called for a pioneering strategy of socialising using sedation and a period of acclimatising in pre-release pens. As a result, the conservancy's lion population now has one of the broadest gene pools in South Africa.

It is the feline-disease-free status and genetic diversity of these healthy populations that makes them ideal for the establishment of new source populations, the supplementation of dwindling populations across Africa and, in some instances, their reintroduction to reverse local extinctions.

This was the case in 2015 when, in collaboration with African Parks, five with African Parks, five lions from the reserve were donated to the Akagera National Park in Rwanda, reversing a 15-year local extinction.



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Cheetah translocated to other EWT Metapopulation sites to support genetic diversity



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Rhino moved from South Africa to Botswana by Rhinos Without Borders from 2018 to 2019

Black rhino translocated to new WWF-Black Rhino Range Expansion Project sites to support generic diversity

Temminck's ground pangolin pup born in the &Beyond Phinda region in over three decades 924

50 000

16 000

36.52

Increase in total number of recorded cheetah monitoring locations from 2017 to 2019 on&Beyond Phinda

ACHIEVEMENTS

USD invested in lion conservation by &Beyond as founding member of Lionscape Coalition

Conservation lessons given across & Beyond Africa operation FY 2018 - 2020

Million ZAR contributed by &Beyond Phinda to the protection of the Mun-Ya-Wana Conservancy

