

THE BARKING GECKO

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**REPORT ON
MOUNTAIN ZEBRA PROJECT
GREETINGS FROM THE CEO**

WORD FROM THE WARDEN

**CHASING CHICKS AT NAMIBRAND
TALES FROM THE SOUTH
NEWS FROM NaDEET**

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*"The poetry of the
earth is never dead."
- Anonymous*



EDITOR'S INPUT

The first quarter of the year is over. Easter is nearly upon us.

On the Easter weekend, we are hosting members of the Birding Club at Keerweder. The idea is that these lovely ladies and gents will be doing some serious bird atlasing on the Reserve, along with Holger Kohlberg (please see his article on vulture ringing in this edition of the BG). We are looking forward to this weekend immensely and can't wait to see what surprises might stumble across.

We have been holding off on planning a Big birding day on the Reserve, due to the distressing, lack of rain over the last few years. The drought seems to have set in fully and fauna and flora are looking weary and struggling in our current conditions.

Around early January, we saw a number of gemsbok calves and zebra foals. We were hopeful that they knew something we didn't! Unfortunately, not, and now there are very few sightings of your wildlife, leaving us to wonder whether they have moved off to greener pastures along with their herds, or whether they have perished due to the incredibly challenging times.

It is ironic, that World Water Day is on the 22 March. World Water day deals with, well water, in all its shapes and sizes. (worldwaterday.org). The 2018 theme for this is 'Nature for Water' and explores how nature can be used and implemented to help deal with the challenges we (as a global village) face when it comes to water. There have been several theories recently regarding the drought and changing weather patterns of the world, but also, closer to home, in the desert. We have been experiencing the strangest winds and weather. While we've had some very hot days of the last few summer seasons, this summer it has felt much hotter than previously, with the strangest winds coming and going.

I am hopeful that we may still get some small relief in the form of rain, however I am not holding my breath.

With that said, I'm going to take a look outside and hopefully see some cloud build up making its way towards the Namib from Windhoek!

Wishing you all a wonderful Easter and a fabulous second quarter of the year.

All the Best

Lee Tindall



WORD FROM THE WARDEN

Very dry NRNR looking South over Kwessiegat

Murray Tindall

of how well they work and whether it is a viable long term option. It's a very exciting time in conservation and with the cooperation and dedication of everyone and the technology we now have; the opportunities are endless.

Despite new technology, often good old fashioned 'boots on the ground' is still the best way of picking up on changes in the area, which animals have been visiting or seeing things we might miss from a vehicle. On numerous walks around the Keerweder area, we have spotted giraffe tracks, as well as jackal and occasionally cheetah paw prints. We are hoping to put up a few more camera traps in strategic areas to monitor activity at certain waterholes. This is interesting, as well as a good way to get an idea of the animals around.

For now, we have to hold thumbs and hope for late rains.

Wishing you all rain, a productive 2nd quarter of the year and wonderful sightings, whoever you may go.

The meetings held throughout the 1st quarter of the year, have been productive and positive with good outcomes and action being taken afterwards. The year ahead should be a good and positive one, based on its beginning.

After a few guides meetings, a new system for logging sightings is being test run. The system works via an app on phones, in which you can add details and data of the sighting and the GPS points are logged and recorded. Apps like these are making citizen science' a more realistic goal. These apps (and the people who use them) will be assisting in gathering more accurate numbers and understanding of Namibia's wildlife. Hopefully, by the next edition of the Barking Gecko we will have a better idea



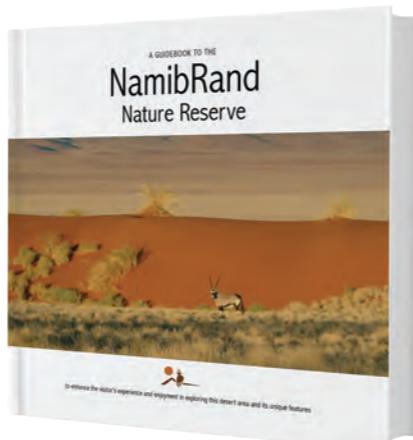
Hopeful 2018

MESSAGE FROM THE CEO

Nils Odendaal

Proper rain on the Reserve have thus far eluded us for this rainy season and the Reserve is now the driest that I have ever seen it. On a recent visit to NamibRand, it was obvious that those animals that have not migrated away in search of grazing, are in poor condition and that life giving rain is desperately needed. We continue to hope that some rain will still fall during the remainder of the wet season and we are optimistic that there will at least be some downpours in March and April so that the resident animals get some reprieve!

On the 9th of November 2017 we launched our NamibRand Guidebook and NamibRand documentary film at a very successful event held at NICE. The event was attended by all those involved in producing the book and film, friends and



Our book: "A Guidebook to the NamibRand Nature Reserve" is available at most bookshops in Namibia for around N\$350.00. You can also buy it directly from us.

partners of the Namibrand Nature Reserve and members of the media. We used the opportunity to thank everyone involved in producing these stunning products and to introduce this beautiful book and film to the public.

News from the landowners that make up the Reserve is that Mrs Christiane Berker has decided to sell the farm Kwessiegat. We are very sad to lose Christiane and her family, who have been an integral part of the Reserve for the last 20 years! Christiane also served as a director for the NamibRand Nature Reserve Association for many years and was influential in shaping the present day landscape and governance structure of the Reserve. We have just learned that the successful buyer of the farm Kwessiegat is the company Natural Selection Safaris Namibia (NSS). Shareholders of this company include conservation legends Collin Bell (Founder of Wilderness Safaris), Dave Van Smeerdijk (Former Wilderness Safaris Managing Director) and passionate environmentalist / NamibRand enthusiast – Peter Koep. NSS have indicated that they would love to remain members of the NamibRand Nature Reserve and actively contribute towards the mission and objectives of the Reserve! The sale is yet to be finalised and will keep you posted on developments in this regard.

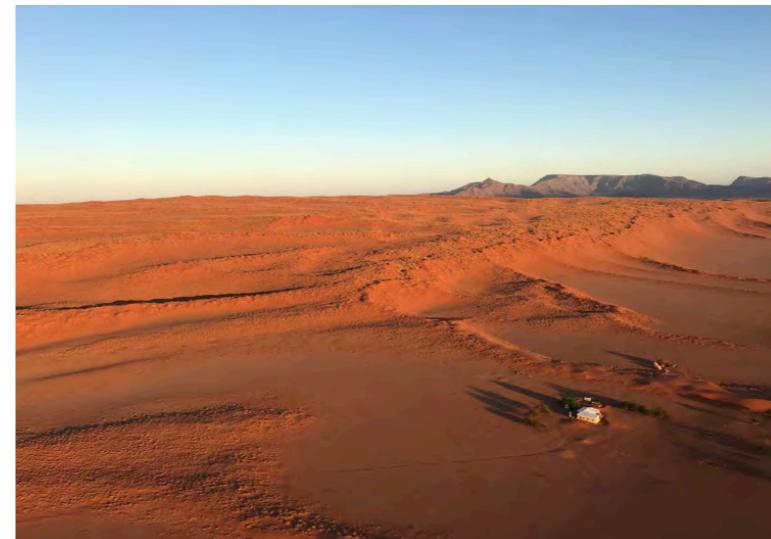


Animals are losing condition due to the drought



A DESERT MIRACLE
an odyssey into the NamibRand

Our documentary film – A Desert Miracle - will soon be for sale through our Windhoek office or through curio stores at Lodges on the Reserve.



Kwessiegat homestead by Nils Odendaal

now been monitored for the past five years in an effort to better understand the ecology of these animals as well as impact that external factors, such as fences are having on the prosperity of these animals. For reports on this project please visit the library and resources link, under management, on the website www.sossus.info

We are thrilled to announce that a new agreement to remove the fences between the NamibRand Nature Reserve and our neighbours in the South, Kumbis and Sonop, has been signed. Co-owner of these neighbouring farms, Mr Le Roux Van Schalkwyk, is a passionate conservationist who shares our vision of a Fence Free Namib.



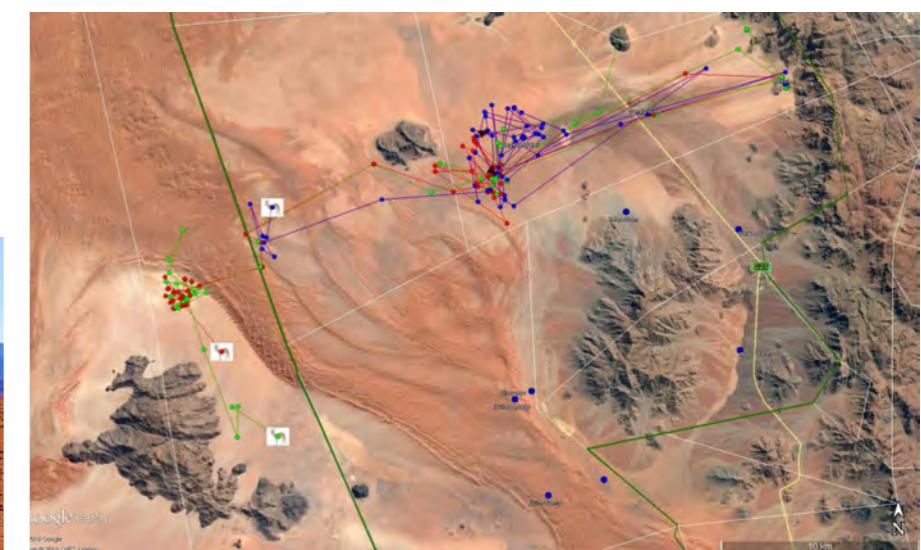
The fence on the Southern boundary of NamibRand is a death-trap of animals and thankfully this will soon be removed!

Owners of the NamibRand farm Dina, with special effort from Willem Oets and Lydia Ellis, have finished building a new house in the South of the Reserve. The house is for the use of the shareholders of the farm Dina and it was built in a record time of just three months by building contractor Saar Porteus! Congratulations on a stunning house, made beautiful and unique by the special finishing touches of Lydia Ellis!

We would like to thank Dr Mark Jago for his vegetarian services and Dr Henrik Rasmussen from Savannah Tracking for helping us to deeply three gps tracking collars on springbok in December. A special thank you also to the Giraffe Conservation Foundation for providing transport. These collars were deployed as part of our Greater Sossusvlei-Namib Landscape Association wildlife monitoring project. The seasonal migration of several oryx, zebra and springbok have



The new Dina House in January 2018 – by Lydia Ellis



Map of collared Springbok movement

Regards

Nils Odendaal
Chief Executive Officer

Nils Odendaal

TALES FROM THE SOUTH

TEXT AND PHOTOGRAPHS Peter Woolfe

Greetings to all from the South. As we enter the busy season concern continues over what looks like another year of drought. Aandst  r was also the recipient of a new solar installation reducing our carbon foot print considerably and finally a plan to get rid of the scrap that has accumulated over the years.

To date we have received even less rain than last season, with the only meaningful precipitation being 32 mm at Straussenwasser and 18 mm at Gorasis. Beyond that just a couple of mm here and there. Most noticeable have been the relatively very cool temperatures for the time of year with early morning temperatures as low as 10 degrees. A few days ago I had to put on my fleece! In March! I hate to think what this might mean as far as expected winter temperatures might be. Although it is not too late to get some rain it certainly does not look or feel promising.

A new solar power system has been installed at Aandst  r. Twenty four 260 watt solar panels charging twenty four deep cell batteries delivering some 1500 amps of power. Wow, what a difference! This should more than half our carbon output not to mention the reduction to noise pollution at the homestead.

Another project that has been close to heart for years now has begun. Removing the fifty years of scrap and rubbish that has built up around the homesteads in the South. We have started with Saffier and Springbokvlakte, nearly complete now, and next will be Kumbis and Aandst  r. What a difference it makes reminiscent of the emotions evoked by removing a fence.



Scrap Metal removal in the South



Pete Koen from Maltahohe removing scrap metal from the South

On the subject of fences another positive development is we now have the go ahead to remove the fence between Kumbis/Sonop and Saffier/Springbokvlakte. This will effectively amount to about another 10 kms of fence being removed!

In conclusion we wish all our concessionaires a wonderful season. We remain optimistic that the weather might deliver a surprise for us all.

From all of us in the South.

NEWS FROM NaDEET

Panduleni Haindongo

NADEET LAUNCHES *IT'S TIME TO GROW* IN MOTHER TONGUE

NaDEET with funding from the UNESCO Participation Programme through the Namibia National Commission to UNESCO translated and published the *It's Time To Grow* booklet from English into three local languages; Khoekhoeogowab, Otjiherero and Oshindonga. The overall aim of the publication is to improve the quality of Education for Sustainable Development (ESD) in Namibia and to also increase the number of learning material in vernacular languages in Namibia. The launch took place on the 23rd January 2018 in Windhoek at the NICE Restaurant. In her keynote speech, Mrs. Edda Bohn the Director of Programmes Quality Assurance in the Ministry of Basic Education, Arts and Culture in her emphasized on the significance of creating such educational material in other languages to have a full coverage of all the vernacular languages of Namibia. The educational material was distributed to various schools around the country with the assistance of the Ministry of Education, Arts and Culture. The booklet also comes along with memory games for the lower primary school teachers and learners who are the main targets of such educational material.



NADEET Origo Group Centre

NADEET CENTRE

Before the arrival of the first school groups, staff members at NaDEET Centre were busy with maintenance work such as oiling of the houses and road works. The Centre opened its doors to Origo Primary school from Rehoboth in the second week of February. With their enthusiasm, the learners were a perfect start to the year as they were interested in the programs of the day and they concluded their visits with dramas and concerts about what they have learned. With Waldorf School and Amazing Kids Private School also booked for February, another 22 schools have already made their bookings for 2018.



NaDEET Staff Oiling @ Centre



NaDEET Edda Bohn & Viktoria @ ITTG Launch



NaDEET Origo learners drama

REPORT ON MOUNTAIN ZEBRA PROJECT IN NAMIBRAND NATURE RESERVE

Prof L. M. Gosling, Newcastle University, UK and Namibia Nature Foundation, Windhoek

The Mountain Zebra Project started in NamibRand in 2010 and aims to estimate and monitor numbers of this species and understand why they vary. Such information was previously unknown for the Reserve and is difficult to measure from ground counts. The central technique employed is individual-based monitoring using camera traps placed at waterholes (Figure 1) and field visits to photograph social groups. Individuals are identified using a novel coding system based on fingerprint-like variation in stripe patterns and numbers are estimated by enumeration and by mark-recapture. The project is conducted in collaboration with the Warden and his staff and regular feedback is provided. This article reports briefly on the latest data from 2017 and on some preliminary longer term results.

There will be further analysis of camera trap results from 2017 but the current analysis is well-advanced. 401 individual mountain zebra (HMZ) have been identified and, of the 387 animals identified in the previous year, 63% have been re-sighted so far in 2017. This percentage will increase a little but in ongoing analysis, the great majority of identifications from 2017 photos are now of animals that have been seen previously during the year. 75 of the 401 animals identified in 2017 have never been seen before. Such new animals generally occur because of reproduction or because they have moved as adults into the area. A third possibility, that animals were present but missed is unlikely since HMZ are water-dependent and thus likely to appear on some of the many thousands of photos taken by camera traps placed at waterholes. In 2017, 85% of the new animals were over 2 years old, so while there have been a few new foals, the majority are adults and the numbers indicate a moderate level of movement in and out of the area in a year with below average rainfall.



Figure 1. Mountain zebra are water-dependent and cameras placed at waterholes can potentially monitor the entire population. Stripe patterns are distinct and so individuals can be followed throughout life and records combined to monitor populations.

Analysis of long term changes in HMZ numbers is limited by unplanned variation in the performance of cameras and consequent sampling bias. However, the camera in the Moringa valley has been consistently in place and trends can potentially be detected using the 'source population' for this camera. This term refers to the population of animals that visit an area or camera but are not always in that area. There is a high level of connectivity between Moringa and other waterholes in the north-east: 29% in the case of the Porcupine waterhole which is 9 km away; and even 5% with Verweg 23 km to the South near Losberg. The Moringa camera thus samples a wide ranging population probably extending throughout the Nubib mountains. Excluding the value for 2010 and those for the last two years which are still incomplete, the mean size of this source population is $428+/-17$ ($+/-$ SE; $n=5$) with remarkably little change throughout the period (see graph below). The total number known alive from all NRNR cameras (5 in 2017) over the same period was $618+/-14$, and so, with the reservation mentioned previously about sampling, the Moringa source population is probably about 69% of the northern Reserve population (from the northern border down to and including Losberg).

The number actually in the Reserve at any one time can be estimated using mark-recapture technique (described in previous reports) or more accurately 'sight-resight' in the case of an individually known population. Previous estimates for the northern part of the Reserve were $178+/-9$ and $235+/-14$ in 2010 and 2011 respectively and these estimates were 37% and 41% of the source populations for those years. Most of the remaining animals were probably ranging outside the Reserve to the east, in the Nubib mountains and beyond. Similar proportions may apply to the Moringa source populations and this will be checked in future analysis. However, most attention is given to the source population in this study because (1) this population gives a more accurate indication of genetic viability, and (2) because it's full range, encompassing other landholdings, must be considered for conservation management of the animals that visit NamibRand.



Figure 2. Waiting to drink at the Moringa waterhole. The animals are members of a breeding group and the small waterhole is occupied by a dominant female. The two animals on the left are offspring of females in the group, the youngest born in the 2016-17 winter and the male on the far left born two years earlier in 2015

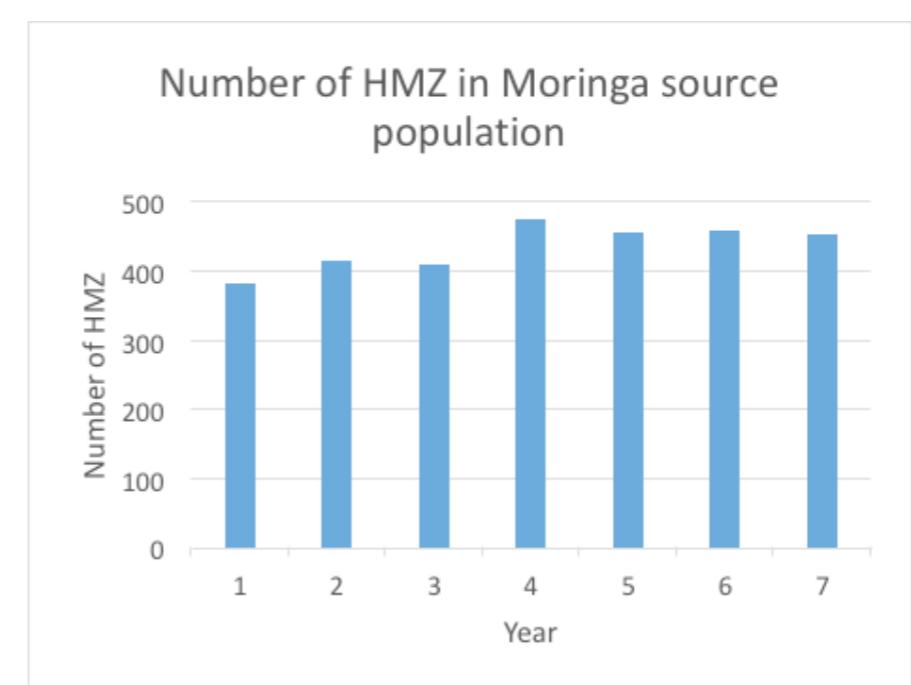


Figure 3. Estimated numbers of HMZ in the Moringa source population from 2011 to 2017. Numbers in 2016 and 2017 are estimated from previous data on the relationship between numbers identified and the total eventually known to be alive. There is an indication of a slight increase in the early years but overall the population has been approximately stable over this period.

The information from Moringa suggests that the HMZ population is relatively stable and research is underway to measure the population processes that are characteristic of this state and that potentially limit its size. One key variable is the mortality rate of adult animals. Mountain zebra may live over 20 years in captivity but ecological longevity in arid areas is probably less than this and there is a possibility that the NRNR population has a balanced age structure, that is, with a substantial proportion of animals approaching ecological longevity and dying from age-related causes, perhaps mainly in dry years. Considering all of the animals identified in NRNR, there were 201 animals over two years old when first seen in 2010 and of this sample 81% were still alive 4 years later in 2014. A similar analysis can be done on the 287 animals over 2 years old that were first seen in 2011 and, of these, 75% were still alive 3 years later in 2014. If it is assumed that nearly all of the missing animals died (as opposed to emigrating) this gives an annual adult mortality rate of about 5-8%. More data are needed to substantiate these values and to establish mortality rates in relation to rainfall variation between years.

I am grateful for the support and collaboration of Nils Odendaal, Murray and Lee Tindall and their colleagues at Keerweder. Thanks also to the Directors of NamibRand for permission to carry out this work and to the Rufford Foundation, Parc Zoologique de Montpellier, the Gaia Nature Fund and the Namibia Nature Foundation for financial and other support.

**Morris Gosling,
Newcastle, 14 January 2017**

CHASING CHICKS AT NAMIBRAND

Holger Kohlberg

Every year in October when it is nice and hot a group of people gathers in the Namib to pursue what they call a fun activity: ringing Lappet-faced Vulture chicks.

Somehow word must have gotten out about this and sometime in August 2017 I received an email inviting us to expand our activities to NamibRand Nature Reserve. Easier said than done! Ringing Lappet-faced Vultures in the Namib is a major logistical exercise involving aeroplanes to find the nests, schlepping a huge ladder around to reach the nests and copious amounts of Namibia's finest to quench one's thirst at the end of the day. No problem! An extra drum of avgas was quickly organised (Thanks Wilderness Air!) and our air wing was more than keen to include a new area (although I think if they had known that it involved five hours of non-stop flying they may not have been so keen).

On day zero, 5 October 2017, Axel and Harald landed at Keerweder where they met with Murray



Holger Kohlberg work

and were briefed about where to look for the nests before embarking on their epic five-hour flight. The results were encouraging: seven waypoints. Perhaps I should explain here. During the aerial survey all prospective nests are logged on a GPS and these points are then visited on the



Nest near Jagkop 7.6 m



Taggong Team Draaihoek

ground. This cuts down on time spent looking for nests and reduces driving in sensitive areas.

On 9 October my friend Volen (the Terrible) and I arrived at Keerweder, ready to tackle the nests the next day. Unfortunately our guru and mentor, 'Oom Piet' Bridgeford could not join us, a broken spring on his trusty vehicle put paid to that.

We left early the next morning, picking up the other Peter at Aandstér before heading for the first nest at Springbokvlakte. High-tech is used to check the nest contents (that ladder is way too heavy to put up every time), so up went the GoPro on a long pole and out went chick from nest. This was definitely not its maiden flight



Vulture Tagging 2017

We then had success at Satanskop and Straussenwasser i.e. here chicks were ringed and fitted with wing tags and then we found a bird sitting on an egg at Schafberg. After a brief stop for lunch we headed off to the next nest at a place we named 'The Middle of Nowhere' when we finally reached it in the dunes. Fortunately, there was a chick in this nest or there may have been some serious mutterings about the observational skills of our air wing. After that we still ringed and tagged chicks at Jagkop and Draaihoek.

Our first, but hopefully not last, ringing expedition to NamibRand had been completed and now we all wait and hope to see 'our' chicks on the various cameratraps dotted around the reserve and in the Namib-Naukluft Park.

EDITORS NOTE

My sincere thanks go to Nils, Lee and Murray for their support and hospitality. Wilderness Air is once again thanked for the donation of the avgas that made the aerial survey possible.

Holger Kolberg
Ministry of Environment and
Tourism
and Vultures Namibia
Windhoek

NamibRand Nature Reserve has taken part in the Vulture ringing in the past, with Peter Bridgeford. This was a first that NRNR and Holger did this together. What a special and inspiring experience it always is.

Lee Tindall

Many thanks to those of you who have contributed to this issue of The Barking Gecko by providing articles/information: Nils Odendaal, Murray Tindall, Peter Woolfe, Panduleni Haindongo, Morris Gosling and Holger Kohlberg. The Barking Gecko is not possible without your input.

The Barking Gecko is your newsletter and, as always, we invite you to keep on sending us your contributions of news and views, short reports, sightings, artwork and photographs.

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