

THE BARKING GECKO

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GREETINGS FROM THE CEO

WORD FROM THE WARDEN

CAMELTHORNS

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NEWS FROM NaDEET

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



Skyhawk Photography

ALBI'S ARCHE TRUST

Andreas Brueckner



Our father Albi Brueckner was very concerned that the NamibRand project should be safeguarded - in perpetuity if possible - after his passing. To this end he made provision in his will, after consultation with his family, for the establishment of the Albi Arche Trust.

The name, derived from Noah's Ark, is symbolic for the continuation of his dream, as it will survive any "flood" that may happen in the future.

Albi Arche will house the original NamibRand farms where it all started, to name them Gorrasis, Stellarine and Die Duine as well as half of Toekoms.

The other Toekoms half together with Wolwedans and Jagkop are

part of NamibRand Desert Trails (Pty) Ltd. which has the same long term objective of securing the land for conservation in perpetuity.

Together this core of NamibRand will stay forever unless it is expropriated.

This pledge, to keep it this way, we made to our parents at their combined 80th birthday party at Nice in 2010, and Albi left this earthly world content in the knowledge that this pledge would be upheld.

We have always been united in the belief that the land doesn't belong to us, but that we merely look after it.

The trustees of Albi Arche Trust are Stephan Brueckner, Nils Odendaal, an accountant

(Andy Welzig), a lawyer (Jens Roland), and Andreas Brueckner representing the Trust on the NRNR board (after our application has been accepted, which we trust will be a formality)

Stephan Brueckner in turn remains the representative for NRDT on the NRNR board.

The land, much like any other land that forms part of the NamibRand Nature Reserve, will be subject to the statutes of the Reserve and managed accordingly.

There will be no major changes, except that we may want to breathe some life back into the quaint little house in Gorrasis as this is the Alma Mater of the NamibRand Nature Reserve.

EDITOR'S INPUT

As ever, I am utterly amazed by how time flies and how quickly we move forward! You would think that, by now, I would know this. It's been a busy year so far, with many good things happening and good work being done as ever.

We have had a large number of researchers in the Reserve recently, always wonderful and interesting. Two of our recent visitors have sent their popular articles, both very interesting and hopefully enlightening. Professor Ralph Kuehn and his colleagues from the Technical University of Munich had a great time here, following Mountain Zebra and Plains Zebra and collecting scat. Dr. Adrian Davies, based in Namibia, visited the reserve and allowed us to pick his brain and vast knowledge, he has sent us a great article on Dung Beetles.

Despite some reasonable rain in the beginning of the year, in various patches, we are back to feeling the effects of the drought. Animals are generally found at, or very near to waterpoints and there is limited grazing available for wildlife. We have seen many young zebra - born this season, now slightly bigger and bit less likely to be an easy meal. It's beautiful to see, and heart-breaking, as one wonders what they will survive on for much longer.



It takes a lot of work to manage a reserve and a lot of hard work and time go into it. With that in mind, I thought it would be great to introduce our readers and followers to the people whose dedication makes this all possible. Over the next few Barking Gecko's you'll meet those, 'behind the scenes' people who are vital to the functioning of NamibRand Nature Reserve.

With that, I wish you a wonderful time reading the articles and gathering knowledge on dung beetles, zebra scat and the story of how a photo is born.

Regards

Lee Tindall



MESSAGE FROM THE CEO

Nils Odendaal

On the 26th of May the NamibRand Nature Reserve Association held its 19th Annual General Meeting at the Wolwedans Village on the NamibRand Nature Reserve. At this occasion the members of the association voted unanimously to include the farm Keerweder (Maltahöhe District farm no 126) and the farm Verweg (Maltahöhe District farm no 143) into the NamibRand Nature Reserve Association. Previously these farms were leased, but they were never officially part of the Reserve. A big thank you to Mr Christopher Braun for putting his faith in us by officially deciding to join the Reserve! Keerweder is where our warden's headquarters are located and thus forms an integral part of the Reserve!

On the 27th of May our 13th annual game count took place. Thank you to all those who participated, without you we could not do this important job of monitoring our plains game. Results indicate that the overall wildlife population is on the increase compared to previous years! This is perhaps due to the isolated thunder showers received in a few places on the Reserve this year, which have resulted in good grazing in those small areas, attracting wildlife from the surrounding areas. Read more detail about this year's game count later on in this issue.

At this year's AGM we screened the first edit of our NamibRand Nature Reserve Nature Documentary. This movie documents the establishment and the history of the Reserve. Stunning landscape photography is combined with interesting conversations with people such as our founder, Albi Brückner, our first tourism concessionaire, Eric Hesemans and people such as our first wardens; to name Achim Lenssen and Peter Bridgeford.

Our new book: "A Guidebook to the NamibRand Nature Reserve" is out! Years of hard work have paid off in the form of a beautiful and comprehensive book about our Reserve. We could not be more proud of this awesome publication that was made possible through the hard work of Dr Ann Scott and Danica Shaw who spent countless hours collecting, writing and editing text. Contributors to the book include Mike Scott, Nils Odendaal, Dr Antje

Burke, Dr George Tucker, Dr John Irish, Dr John Kinahan, Louise Clapham, Ken Hart, Dr Morris Gosling, Nicole Ulrich and Dr Florian Weise. Thank you!

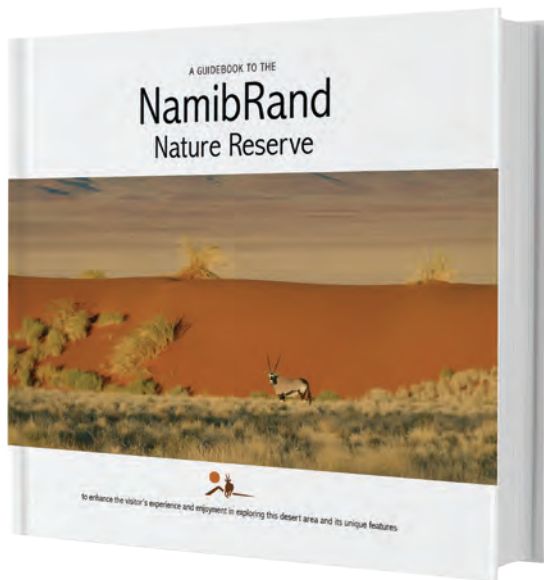

Layout and publishing was done by Venture Media and the high quality print was done by John Meinert Printers. The book is now available at the Book Den in Windhoek (Corner of Hosea Kutako Ave & Puccini Street. Tel: 061-239976 or email emlarie@bookden.com.na) for N\$350.

This book is dedicated to the late J.A. (Albi) Brückner, 14 August 1930 – 08 December 2016. Albi was our founder, chair and custodian and his conservation legacy will continue in this exceptional place.

I hope you enjoy the rest of this newsletter!

Yours faithfully,

Nils Odendaal
Chief Executive Officer



Skyhawk Photography

WORD FROM THE WARDEN

Murray Tindall

At this year's game count briefing I mentioned that I anticipated a decline in the total animal numbers due to the ongoing drought across most of the Reserve. To my great surprise, once the numbers had been crunched and the results came out, the total number of animals had actually increased! All of the major species counted, Oryx, Springbok, Plains zebra and Red Hartebeest, showed a growth in their individual populations. The table below shows a comparison in the numbers between this year and last year. We are busy trying to verify the result and having a look at the methodology to determine whether we can accept these numbers as they are, but even if we assume the estimates are incorrect the total number of animals actually

seen was far higher than last year as well. I can only speculate that the rain we had in the Keerweder, Jagkop, and Draaihoek areas caused large numbers of animals in drier areas in the National Park to migrate onto the Reserve!

Many thanks must go to the two students from the University of Nebraska, Marika van Brocklin and Kayla Gadeken for the tedious task of entering all of the count data into the database and putting together an initial report of the game count, as well as all of those who helped with the actual counting on the day. A final word of thanks to Larkin Powell for delving a little deeper into the data to see if there is a way we can improve our methodology.

Wildlife numbers on NamibRand for May 2016 and May 2017 (Zone 1-10; 224, 209 ha)		
Wildlife Species	May-16	May-17
	Estimated Wildlife Numbers From May 2016 Game Count	Estimated Wildlife Numbers From May 2017 Game Count
Gemsbok	6650	10 625
Springbok	2944	3 243
Kudu	0	4
Steenbok	0	0
Ostrich	144	226
B. Zebra	440	717
Red Hartebeest	149	174
Total	10,327	14,989

CAMELTHORNS

Maria Wilén and Barry Dworkin

This April we returned to continue a project that we began in 2011. Our goal has been to make photographs of the ancient trees and great rock formations of NamibRand that express the colors, textures and shapes in a way that creates a sense of being in the landscape. The visual experience of the Reserve goes from the gigantic to the microscopic: there are soaring peaks against the brooding sky, and delicate lichens carved from the substrate by the glancing light. The branches of the great old trees, arch, reach and swirl, but each branch also holds patterns of leaves, pods and thorns. Photography in making things bigger or smaller, creates or obliterates form, texture and pattern. What we see standing in a place is different from when it is compressed into a picture frame. For example, made smaller, barren patches strewn across a vegetated plain are revealed to be a dense pattern of near perfect circles, or greatly magnified, grains of sand take on the form and texture of a craggy mountainous vista. Moreover, when we look out onto a distant panorama, part of our experience is knowing the detail that lays hidden within the vista. The NamibRand experience is especially challenging to photograph, because, to create the true sense of being there, both its awesome stark vastness, and intricate detail must somehow be made to merge in the image.

How best to capture this feeling, and convey the experience? The ready answer is “make a movie”. A film sequence can pan or transition from the distant to the near – it can show us where we are and then moments later what is there. But a movie is very different from a photograph: Aside from the obvious, that you can’t hang it on the wall, in watching a movie you surrender your freedom to decide what you will look at, and for how long and in what detail you will look. The cinematographer, not the viewer, decides and controls what and when things are seen. For all its visual “excitement”, in watching a movie, there is little if any sense of exploration and discovery. But, is a “still” photograph any different?



It can be! Very large, highly detailed, images can both show the whole and allow exploration of underlying detail. A high end SLR can make impressive images, but there are absolute optical limits to how much detail can be fitted into a 24 x 36 mm frame; for extreme realistic detail there is no substitute for a big negative. Ansel Adam’s iconic photographs of the American landscape were all made with negatives 15 times larger than the sensor of a full frame digital SLR. To achieve the optical quality of Adam’s images, we use a camera like his – a classical large format view camera - that, in place of film, has been equipped



with a state-of-the-art 100 x 120 mm digital sensor, connected to a computer “viewfinder”. The setup is heavy, cumbersome, and complicated (see the photo), but can produce images of unsurpassed colour and breathtaking resolution (see image and inset). Because an exposure can take several minutes, wind and moving clouds are problems, which we have had to learn how to overcome: the rock formations are relatively easy compared to the trees with leaves that flutter in wind and branches which produce changing shadows on trunk and on the ground. Staying at “our base camp” Kwessiegat, we travel to the area of Draaihoek and Toscaan where there are many impressive specimens. It can take several hours to arrange the equipment and assemble the

exposures of an individual tree. As we study the images on the computer, we gradually become familiar with the many aspects of each, and it is much like getting to know a very old person.

Although we continue to make “portraits” of rock formations, in a 2014 exhibition in Sweden, two images of the old trees proved to be very popular; so we have decided to focus on the camelthorns in the coming year. Large prints (100 x 135 cm) of the earlier images are in the library of the Nordic African Institute in Sweden, and in private collections in the US and Britain. We would like to have an exhibition in Namibia, but because the prints are too large to be transported from Europe, we need to find local facilities for museum quality printing.

TALES FROM THE SOUTH

TEXT AND PHOTOGRAPHS Peter Woolfe

Greetings to all from the deep South! Well the late rain we were all hoping for never materialised and so the drought conditions continue. The veldt in some places down here is literally non existent – just sand and rocks and dead or dying shrubs and trees. On the bright side there are some positive developments taking place here so let me rather talk about that.

Things are moving forward on Dina with the location and plans for the new house being agreed and approved. Building is scheduled to start in September and should be completed by the end of the year. We have put in a scenic new road connecting the South west of Dina to the site of the new house next to Goud Koppie, thereby giving us direct access to the site without going via the main road.

We have also replaced the old Hatz generator at Aandster with a newer John Deere. Great fun getting the old one out of the cramped genny room and the new one in! However, we made some clever plans and got it right in the end. The next project is a new solar system, panels and batteries, that will hopefully enable us to reduce our carbon footprint.

By September the two 'hot compost' heaps we made in April will be ready for application in the Aandster vegetable garden. The compost already has that rich earthy scent one looks for. We are very excited to see the difference this will make to the yield and quality of our veggies and the grape harvest.

There have been a few predator sightings in the South during the period, both cheetah and leopard. Jaques got a leopard with cubs near Horseshoe. We also have a new giraffe calf bringing the number in the South now to seven! The



plains animals are now totally reliant on areas of old veldt and we just hope it will be enough to see them through.

As I am sure everyone has noticed the condition of our main roads. it is the worst I have ever seen. The roads are appalling and resulting in road accidents and deaths all over the country. Not good for our tourism! I was amazed to see a pad skrapper on the Vloerer road the other day – probably the one road in the area that least needs it! ATATATA!

Well we wish you all the best for the rest of the season hope that we will all be able to report good rains in the next edition of the Barking Gecko.

Cheers from us all in the South!



IN SEARCH OF ANCIENT ORIGINS - DUNG BEETLES IN HYRAX MIDDENS

Adrian Davis & Christian Deschodt



Figure 1. *Drogo stalsi* Deschodt, Davis & Scholtz, 2016, a close relative of the new flightless dung beetle species currently known only from the Nubib Mountains, NamibRand Nature Reserve.

Reserve. The discovery filled the gap in the known range and added three new species to a genus previously represented by only a single species found near Rosh Pinah (Fig. 1). Each of these new species will be described and placed into evolutionary context in due course.

In addition to the one flightless dung beetle species that was found only in the Nubib Mountains of the NamibRand Nature Reserve (Fig. 2), an undescribed flying species was also attracted to hyrax middens at the same locality. This flying species was recorded elsewhere as far north as the Kaokoveld, but only in rocky mountainous localities. It, also, will be described in due course.

Owing to the fragmented topography of the mountains along the arid west seaboard, it is predicted that future surveys of rock hyrax middens will discover further, undescribed, dung beetle species, particularly, range-restricted flightless taxa.

Genetic molecular analyses suggest that scarab dung beetles have a history stretching back up to 70 million years or even longer. These analyses also suggest that dung beetle groups with the oldest origins are found in Southern Africa. One of these very old, basally-derived groups is centred on arid regions along the western seaboard between Namaqualand (northwest South Africa) and the Erongo Mountains (northwest central Namibia). To date, six genera and 14 species have been described for the group, most within the past 15 years. All are flightless and uncommon.

It is suspected that survival of this ancient flightless group is based on association with concentrations of dung, particularly those offered by middens of the rock hyrax or dassie. At permanent colonies, these middens represent an assured supply of fresh droppings in a harsh climate.

Having plotted the geographical distribution of this beetle group, it was noted that a north / south gap in their known range occurred between Rosh Pinah and the Namib-Naukluft National Park. Therefore, under permit no 2244/2017 from the Ministry of Environment and Tourism, a survey of rock hyrax middens was recently made in southern Namibia by members of the Dept of Zoology & Entomology, University of Pretoria, Tshwane, South Africa. This resulted in the discovery of undescribed, flightless, dung beetle species at Aus, the Tiras Mountains and the Nubib Mountains in the NamibRand Nature



Figure 2. Nubib Mountains in the NamibRand Nature Reserve close to the type locality of the new species of *Drogo* Deschodt, Davis & Scholtz, 2016.

NEWS FROM NaDEET

Viktoria Keding

TRANSPORT CRISIS AVERTED... FOR NOW!

At the end of the first school term our office telephone started ringing non-stop bringing bad news. Our local Hardap Region schools were being forced to cancel their tour to NaDEET Centre due to government budgetary cuts. For the past six years the partnership between NaDEET and the Hardap Regional office for Ministry of Education has enabled thousands of schoolchildren to take part in an environmental education programme at the Centre. For the schools alone the cost of transport is prohibitively high making it not feasible for them to come. NaDEET already works hard to secure funding for programme costs co-sponsorship for less fortunate schoolchildren. But this emergency required an intervention when we learned that the effect of the budgetary cuts will last potentially years not months!

Despite the initial bad news due to the commitment of the stakeholders we were able to remedy the situation. Firstly, the Ministry of Education agreed to still allow schools to use the mini-busses as long as NaDEET secured the funding for the fuel, drivers and any incidentals such as punctured tyres. This was a great relief as it immediately reduced the actual transport costs and the logistics of hiring an outside transport company.

Secondly, the NamibRand Nature Reserve and Greater Sossusvlei Namib Landscape community answered



A special thank you to Wolwedans Foundation, & Beyond, Tok Tokkie Trails, NamibRand Family HideOut, Solitaire, Gondwana Collection and FNB Namibia for your generous support!

Photos: NaDEET
Above: Daweb JSS arriving at NaDEET Centre in the sponsored mini-busses
Below: Jakob Soul PS saying goodbye



our call for help! Within weeks we secured more than enough funds for the transport for the school groups. Some of the groups that initially had to cancel have now even been able to rebook for later in the year.

MESSAGE FROM CHRISTIANE BERKER, LONG-STANDING NADEET TRUSTEE AND NAMIBRAND NATURE RESERVE LAND-OWNER:

It is with great joy that I see how NamibRand (NRNR) came to the rescue to ensure that school children, let down by budget restraints from the Ministry, could still enjoy the importance of sustainable living! NRNR and NaDEET enjoy a win-win relationship, with NaDEET giving all concessionaires a real advertising boost by relentlessly pushing and finally succeeding with NRNR becoming the first Dark Sky Reserve in Africa! Many visitors that get to visit NaDEET Centre while doing a tour with the various operators are deeply impressed with the setup and meticulously thought-out concept of sustainable living. It is wonderful to see that this mutual relationship has carrying fruit and I do encourage all concessionaires to carry on with regular support of NaDEET, as this is a true enhancement for the aims and objectives of NRNR, serving all of us on the reserve by living sustainable living and thus showing us, what we can adopt and integrate at our lodges, houses and everywhere.

NON-INVASIVE GENETIC SAMPLING OF THE ZEBRA POPULATION IN NAMIBRAND RESERVE

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BACKGROUND

Hartmann's mountain zebra is an endemic species to Namibia's Escarpment region and overlaps with plains zebra in northern part of its range. Due to the creation of artificial waterholes acting as gathering points and the restriction of their natural movement due to fencing of communal farmland and protected areas, time and probability of the encounter of both species and the possibility of hybridization has increased. Mixed herds of mountain and plain zebras have been observed, as well as individuals that show characteristics of mountain zebras as well as plain zebras, suggesting increased intermixture of the two species. This has brought up concerns, that current conditions might favor hybridization between both species and increase the threat of

extinction for the mountain zebra. Therefore, our pilot project, entitled "Establishing a methodological toolbox for non-invasive genetic monitoring of Plains zebra, Hartmann's mountain zebra and their hybrids" aimed at establishing a non-invasive genetic sampling design of both zebra species based on scats. Non-invasive genetic monitoring in combination with phenotypic observations are a powerful tool to increase the knowledge about hybridization and to support conservation strategies for the Hartman's mountain zebra. Our plan was to collect samples of scats in the core areas of occurrence of plain zebra and Hartmann's mountain zebra and their overlapping zone, and when possible, tissue samples of dead zebras.



Plain zebras in NamibRand Nature Reserve.

K. Bojarska

THE TRIP TO NAMIBRAND NATURE RESERVE

We arrived at NamibRand Nature Reserve on 10 March. On 11 March in the morning, after a kick-off meeting with Murray and Lee Tindall at Keerweder Homestead (Fig. 1), we headed off together with the control warden, Murray Tindall, in search for zebra's scats. We collected samples at two sites where only plain zebras occur (PZ1 and PZ2 in Fig. 2). When we spotted a group of zebras, we slowly approached them, looking for fresh scats. Sometimes it was possible to see from which individual the scat came from (Fig. 3), which was valuable because we could relate the genotype of defecating animal to its appearance.

The fences around the NamibRand Nature Reserve are an obstacle for animal migration, but many species have learnt to use holes in those fences to get through. To investigate what species and how often use holes in the fences, we raked the sand at five holes (to monitor fresh footprints in sand) and placed photo-traps at two other holes in the fence surrounding NamibRand Nature Reserve from the east (Fig. 4). *Editors Note, NamibRand Nature Reserve is not fenced, except on the boundaries with livestock farmers.*

In the evening, we also observed a mountain zebra male in a group of Plain zebras (Fig. 5 top). This individual has been staying with plain zebras for several years (M. Tindall, pers. communication). We sampled scats of this stallion along with Plain members of his group. This day, the male showed little interaction with other zebras.

In the evening, we visited area where both plain and mountain zebras occur (PZ&MZ in Fig. 2). No zebras were present at the time, but we sampled a carcass of plain zebra.



Figure 4: Katarzyna Bojarska raking the sand at hole in the fence surrounding NamibRand Nature Reserve to investigate what animals cross it based on footprints; a fence-killed gemsbok in the background.



Figure 1: Kick-off meeting at Keerweder homestead with Murray and Lee Tindall, Roman Gula and Ralph Kuehn.



Figure 2: Locations of zebra scat samples: areas where only plain zebras occur (PZ1 and PZ2), where plain zebras are accompanied by a mountain zebra stallion (PZ&1MZ), where plain zebras coexist with mountain zebras (PZ&MZ), and where only mountain zebras occur (MZ).

On 12 March early in the morning, we observed again the group consisting of Plain zebras and mountain zebra male. This time, the stallion was actively participating in the group's social interactions, playing and chasing with other zebras (Fig. 5 bottom). Genotyping the samples which we collected from this group will answer the question whether he also participates in breeding.

Next, Murray led us to the north-eastern part of the NamibRand Nature Reserve in search for mountain zebras. This zebra species lives in less accessible, mountainous parts of the Reserve, so finding them was more of a challenge. When we finally spotted a group of mountain zebras (Fig. 6), they were high up in the mountains, out of our reach. Luckily, we were able to access another group close to a waterhole (MZ in Fig. 2), where we collected a sufficient number of scats.

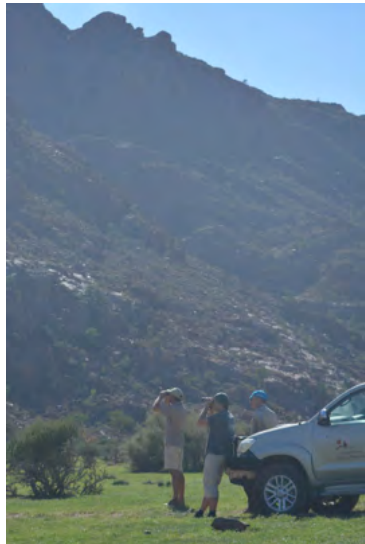
On 13 March, we checked the fence holes that we raked two days before, and collected the photo-traps. We found out that gemsboks and black-backed jackals were using the holes most frequently. gemsboks are not good jumpers (M. Tindall, pers. comm.), so they prefer to crawl under the fence where possible (Fig. 7).



Figure 3: Left: Murray, Ralph and Roman approaching a group of plain zebras (left) to sample fresh scats. Right: Observation of defecating zebras enables collection of very fresh samples for genetic analysis and identification of possible hybrids.



Figure 5: A mountain zebra male in a group of plain zebras in the evening (left) and playing with them the next morning (right).



One of the holes monitored with a photo-trap was quite busy, during 1.5 day we recorded six gemsboks successfully crossing the fence and several others trying to cross but resigning from it.

During our stay in NamibRand, we collected 63 scat samples of both zebra species in four locations, and one tissue sample from a dead zebra.

Figure 6: mountain zebras are not easy to spot from the distance. A group of mountain zebras (on the left) being observed by Murray, Ralph and Roman (on the right).

ACKNOWLEDGEMENTS

We are grateful to Murray and Lee Tindall for their guidance, help and hospitality – it was them who made this trip a success. We also thank Nils Odendaal, Chief Executive Officer of the NamibRand Nature Reserve and Kenneth Uiseb, Vice Director Scientific Service, Ministry of Environment and Tourism of Namibia, for issuing research permits and help with planning and organizing our trip. SAVE Wildlife Conservation Fund provided the photo-traps.



Figure 7: A gemsbok recorded on a photo-trap trying to get through a fence hole.

Many thanks to those of you who have contributed to this issue of The Barking Gecko by providing articles/information: Nils Odendaal, Murray Tindall, Viktoria Keding, Peter Woolfe, Murray Tindall, Professor R. Kuehn, Barry Dworkin and Maria Willen. 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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