

April 2014 Volume 15 N° 1

Rain Rain!!!

After the very dry 2013 we had, 2014 started off with a splash!! It is now much greener than I have ever seen the Reserve being.

Other than the rain being the hot topic we have also had a lot of exciting activities that took place on the Reserve.

We welcomed the new Assistant Managers from Sossusvlei Desert Lodge, Paolo and Emiritta Lillo to the NamibRand family. We hope they will have a long and fulfilling stay and working experience. We wish you all the best.

More cheetah and leopard sightings are continuously being reported. We are very happy to see that we have a healthy predator population on the Reserve.

On another interesting note, our CEO, Nils Odendaal was invited to the World Park Congress 2014 hosted in Sydney in November this year. This is quite an astonishing opportunity. Well done Nils on being invited to represent NamibRand. Nils has been away to Kenya for preparations for the Parks Congress. We wish him all the best with all the preparations. More information and updates on this can be read about in the next issue of the Barking Gecko.

We look forward to yet another term of excitement on NamibRand Nature Reserve and cannot wait to share it with everyone in the next Barking Gecko.

Vanessa Hartung

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Top: Boscia area looking very nice and green after some good rain in February.



A beautiful camera trap picture of a spotted hyena on Saffier.



A magical sunset after the rain at the Draaihoek Waterfall.









News@NaDEET

After frolicking around with various power tools and running around like a headless chicken for a couple of weeks the call for articles for the Barking Gecko came and the NaDEET Director requested a downing of tools and an article from the Technical Department. I procrastinated and thus stressed for a while as sitting down and writing is not what I do best. Stress is a funny thing though. Especially if there is very much of very little stuff to do, we sometimes get so bogged down and concerned with what we don't achieve, that reflecting on what we actually do achieve never surfaces to the forefront of our minds. This has definitely happened since the beginning of the year in the NaDEET Technical Department or let me rephrase in the Technical Director's head. But when I did sit down with my various lists that had materialised over the weeks and consolidated them, I crossed off so many small achievements that I pressed Ctrl S with a most gratifying sigh. And NOW I can sit down and write this article.

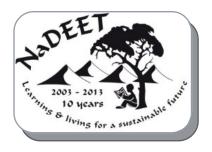
So the year started with NaDEET opening a small head office in Swakopmund. Here we rented a new office and then after looking at prices of office furniture decided to build some office desks ourselves. This of course was a good learning curve as joinery was not really in our repertoire. But with a few setbacks, we got a pretty decently furnished office setup going. This then lead to the next step that we now could reduce the space at the NaDEET office on NamibRand and convert half of the offices into a much needed Arts and Crafts Workshop and additional storage. We still have several staff based at NaDEET permanently who can now be much more productive in reusing and recycling old materials for our sustainable living programmes.

After that much of our time spent was to build a new "home-made" solar hot water geyser out of an old tank for the NaDEET Centre kitchen. This is the second direct system solar hot water geyser that we have made ourselves and we are very pleased with the results. While working on the plumbing at the main building we also fixed up some very old and bad looking pipes and installed a new bench for kids to sit on.

As the times are changing, we are trying to change with them. We therefore are experimenting with better lighting at NaDEET centre main building including new LED technology. All this with Reduce, Reuse and Recycle in mind.

I want to thank all the sponsors that supported us within these projects and all the staff that made them possible.

Andreas Keding





Top: NaDEET staff at their new office in Swakopmund.

Back row (left to right): Andreas Keding, Rosemarie Pauly, Manuela Schimd, Priscilla Kuzeeko & Martha Kambidhi

Front row (left to right): Viktoria Keding, Elizabeth Lammert, Rosina Shilunga & Vicky Endjala

Absent from the picture was: Tobias Thull and Elizabeth Lukas



Middle: The NaDEET office building in Swakopmund.



 ${\it Bottom: NaDEET's new office furniture proudly made by Andreas} \\ {\it Keding.}$

First Kgotla for 2014

The Kgotla management meeting as held on a quarterly basis was held at Wolwedans on 25 March 2014. It was a very productive and informative meeting. Newcomers to the Kgotla were the first time ever female guide (as she was proud to mention) from Wolwedans Cecilia Nghifitikeko and Lydia Shikongo also from Wolwedans. It is heart warming to see the enthusiasm shown by new staff members.

Highlights discussed in the meeting covered from more predators to new bird species and much more.

More predator sightings are reported at every meeting. Even more interesting was that on her way to the Kgotla on 25 March, Manuela Schmidt saw a leopard jumping the fence onto Wêreld end along the Die Duine – Wolwedans fence road. On his way back to Die Duine, Titus Nangolo saw the leopard jump back onto the Reserve.

A Big Birding day was held on Friday 14 March 2014. Only 28% of the NRNR bird species list was recorded on the day. Two (2) new species were added to the bird list, namely the Cardinal Woodpecker and the Herero Chat. They were seen at the Draaihoek Waterfall. The bird list now stands on 176 bird species.

We have also received about five film crews and four researchers in the period of four months.

Compared to our last Kgotla where there was not much to report on rain, this time there seemed to be a lot to report.

Much more rain has been reported on the reserve and surroundings.

Horseshoe has had the most rain recorded at one place. More rainfall figures can be read on page 11, Keerweder News.

Positive developments by concessionaires in their individual operations were reported.

General management matters discussed also included an update on the International Dark Sky project; roads; water installations, boreholes, fences, off-road driving and vehicles; communication and radio procedures; aircraft and fire procedures; training/courses; guide/ranger meetings; and new development updates from concessionaires.

A new item added to the agenda was the Annual Environmental Audit. This is an initiative by NamibRand to contribute towards a cleaner and more sustainable living environment. This Audit will include the monitoring of water, waste water and solid waste management. All the logistics of how, what and when have not been finalised yet but this was the introduction to the initiative to inform all concessionaires on developments on NamibRand.

We sincerely thank everyone who attended the meeting, special thanks to Stephan Bruckner who agreed to the Kgotla being held Wolwedans and also to the Wolwedans Team for preparing snacks and drinks.

Vanessa Hartung



Top: Attendants to the Kgotla from Wolwedans, NaDEET, NR Family Hideout, Namib Sky and NRNR.

News from the South

Greetings to all from the South, and hoping this edition of the Barking Gecko finds you all well, motivated and healthy!

By far the most important news from the south is that, although patchy, we have had good rains. As much as 103mm at Aandstêr and 112mm at Horseshoe. Some areas, however, got as little as 60mm. Either way a marked improvement on last year.

Great news too is that one of the giraffe cows released on Excelsior last year has given birth to a little bull calf. Overall the giraffes seem well settled, spending most of their time moving up and down the Duwisib river complex, and occasionally wandering west to Saffier or north to Stellarine.

An interesting day was spent with local farmer, Oom Martins, with a view to divining a new borehole on Stellarine and Wolwedans. True to his reputation Oom Martins was spot on, using a stick to pinpoint where to drill and a copper wire to assess the depth. The Stellarine hole was drilled at the beginning of March and hit water at 72m and with a rate of 8,5 m³ per hour. Little wonder old photos of the homestead boast a garden on a par with that at Aandstêr.

Four new 'bird friendly' water holes were completed on farms Springbokvlakte and Saffier.

NAMPLACE held its AGM on Neuras in March where the objectives for 2014 were identified. I can report that the NAMPLACE initiative is moving forward and we are on target to achieve the goals set for the initial five year period. As some may be aware NamibRand Nature Reserve has been a major force behind this project. We were also treated to a wine and brandy tasting!!

Another initiative by NamibRand Nature Reserve has been to join the local Maltahöhe Farmers' Association. The principle is to improve our relationship with local farmers by way of open communication and using this platform to encourage farmers to raise their concerns so that we can deal with misconceptions, and help them understand certain conservation principles. The results are already encouraging with two of the more conservative members changing their stance on predator release and predator behaviour. We look forward to a long and mutually beneficial relationship.

Until the next Barking Gecko, cheers from the south!

Peter Woolfe







Top: New borehole at Stellarine. Bottom: The new waterhole at Springbokvlakte.



Top and Bottom: Good rain in the south. Water flooding the roads and the creation of a beautiful rainbow.

Family Hideout News – water and sightings

Water is life!

In November last year, much to our dismay, our borehole on Stellarine collapsed on top of a brand new Grundfos submersible pump. After much struggling by Peter Woolfe, Titus and Reserve staff, even with a harpoon, only sand and a broken cable emerged from down below.

We had plenty of paid-up bookings already for the holiday period, so the only short-term choice we had was to cart water in the De Duine fire trailer to both the Family Hideout and the Hideout Campsite and to pump it into the water tanks there. The popular animal drinking water holes at both locations also had to be shut down, otherwise the thirsty animals would have drunk the tanks dry in no time.

On 3rd February, Peter Woolfe kindly organised Oom Martins Verwey of a farm in the area, who by divining, using only a couple of different branches as well as a wire and a bottle of water, found two strong locations for a new borehole on Stellarine. On Wednesday 19th February, Hammerstein Mining and Drilling arrived onsite, instructed by Albi Brückner, the landowner, and co-ordinated by Peter Woolfe and his Reserve team. Retrieving the pump or rehabilitating the old borehole was not possible. The ground was too uneven, too soft and the building was too close to the hole. The drill foreman said he would not risk it as the rig might fall over and that this exercise would cost more than just drilling a new hole.

So drilling_began at the first of Oom Martins' new locations, in the plain just east of the approach road to the Family Hideout and about 100 metres before the house. It is always a nerve-wracking exercise, drilling into the earth, without concrete proof or guarantee that water is exactly at that point, and how far down below the earth's surface. The drillers were instructed to drill to 200 metres, or until water of an acceptable quality is struck, plus a few metres to create a well.

At about 7 pm that evening, I received a phone call from Nils Odendaal, to say that at 78 metres, the drill rig struck a very strong water resource, causing water to spout up 9 metres above the ground. What a sight it must have been, which fortunately one of the Reserve team (Quintin, I believe) caught on video. Drilling continued to a depth of 100 metres, and this time the borehole shaft was cased, a technique used to prevent the sand and soil from falling into the hole.

It now remained for Peter and his crew to install the submersible pump into the borehole, build a concrete block around it, erect a stand for the solar panels, dig trenches for a pipeline to the Hideout's tank and to meet up with the pipeline to the Hideout Campsite's tank, and to erect a fence around the installation to prevent the Oryx from damaging it.

A huge job well done and what a relief it was to have 720 litres of the clearest of water delivered to our tank per hour, courtesy of the sun, and thanks to all involved for their financial input, technology and man-hours!

We celebrated the new borehole with friends on the Independence weekend (22nd March) – both the water and the champagne tasted like champagne! Thankfully, the animals and birds are slowly but surely returning to drink at both our house and campsite water-holes.

Thrilling sighting

Also on 22nd March, we took a drive on our three hour route in our Dune Drive vehicle, which takes guests over the dune belt and does a circular route between the Schafberg and the Horseshoe Mountains and back again. The area had good rains and was literally teeming with oryx and springbok, and quite a (Continued on page 6)



Top: Water spurted out 9 metres above the ground when it was struck!



Middle: The pipeline and trench leading to the Family Hideout



Bottom: Andreas and Mandy Brueckner, Titus Nangolo and friends celebrating the new Family Hideout borehole

Photo: Beatrice Bı

Photo: Quintin Hartung

(Continued from page 5)

number of ostrich and mountain zebra.

We had a thrilling sighting of four cheetahs at 10:40 just southwest of the road between Schafberg and Horseshoe mountains on the Squirrel Plain.

They were lying together under a bush (probably a Shepherd's tree?) and presumably didn't hear our vehicle approaching until we were very close (about 10m away). Then they scattered at a sprint in four different directions. At least two of them didn't have collars - not so sure about the others. This indicates that they were probably offspring of the cheetahs introduced to the Reserve 3-5 years ago, which is good news since it means that the original cheetahs have habituated and settled on NamibRand

Mandy Brückner





Top and Bottom: Thrilling sighting of the cheetahs just south-west of the road between Schafberg and Horseshoe mountains on the Squirrel Plain.

Research and filming on NamibRand Nature Reserve

Since January 2014 a lot of research and filming activity took place. The new year started off with a bang.

TBS Vision Inc. is a filming company representing Japan Africa. They visited the Reserve early January 2014. They filmed wildlife and scenic landscapes relevant to the Namib Sand Sea. They had successful filming sessions accompanied by Control Warden Quintin Hartung and also Wolwedans staff members.

NHK Enterprises is also a Japanese associated filming crew. They filmed for the production of a nature documentary. They were hosted and guided by Wolwedans.

Another German filming company Cosmos Factory GMBH also visited the Reserve in mid March. They also filmed with the objective of producing a nature documentary named Harnas Wildlife Orphanage (Das Weissenhas fuer wilde Tiere).

After the New Mission filming crew had been hosted at Kwessiegat in December 2013, they returned to the Reserve again in March to do improved audio interviews. New Mission films filmed on the Reserve in mid December 2013. They worked in co-operation with the Namibia Tourism Board (NTB). The NTB is busy producing a documentary of Namibia. In every region one specific place was identified/chosen to represent that region. NamibRand Nature Reserve was chosen to represent the Hardap Region.

On a much different note, we had a visit from a professional Photographer Theo Allofs. Theo flies a paraglider and also take areal pictures. Theo was fascinated by the reserve, the landscape scenery and wildlife. Theo unfortunately had to endure a lot of different weather conditions but hopefully still achieved taking some brilliant pictures. Theo also assisted in a few management activities such as counting zebra and red hartebeest and also scouting for Lappet-Faced Vulture nests.

Current research included research on testing the selforganization hypothesis for the formation of Fairy Circles. More on thesis research can be read on page 11.

Another researcher, Alexandra Rowell and Dr David Thomas visited the reserve from 12-16 April. Their research was on assessing the utility and palaeoclimatic significance of sand ramps as palaeoenvironmental archives in Southern Africa.

Researchers were based at our Research Center, Toekoms, and operated from there.

It has been a pleasure to accommodate all researchers, photographer and filming crews on the Reserve. It is indeed very insightful and interesting to see what they do and their respect for nature.

We are expecting more research and filming activity on the Reserve.

Vanessa Hartung



Top: New Mission Films busy setting up for an interview with Quintin Hartung.

Photo: Quintin Hartun

Commerce and Conservation join forces





Commerce and Conservation joined forces when the NamibRand Nature Reserve received a generous donation of cement from Ohorongo Cement.

The NamibRand Nature Reserve, an Association not For Gain, is located in southern Namibia. The private nature reserve is focused on protecting and conserving the unique ecology and wildlife of the Namib Desert. The land is made up of 16 former livestock farms which have been rehabilitated into a contiguous, fenceless habitat. Innovative approaches to resource management are required to ensure that this critical area, bordering on the Namib Naukluft Park, is conserved for future generations.

NamibRand Nature Reserve is a model for private conservation in southern Africa as it focuses on holistic biodiversity conservation, balanced with financial sustainability and low-impact, high quality ecotourism. Conservation efforts are mainly supported through park fees, collected from visitors, which enable the Reserve to be financially self-sustaining.

However, special projects require additional funding, which resulted in NamibRand Nature Reserve approaching Ohorongo Cement for support. Several of the Reserve's waterholes needed to be rebuilt and a motor gate (cattle grid) had to be moved further south so as to remove a section of road corridor fence, which was impeding wildlife movement.

Ohorongo Cement kindly donated 200 bags of cement towards the NamibRand Nature Reserve as part of its contribution towards conservation and its dedicated efforts to leave a lasting environmental legacy for future generations to enjoy.

Ohorongo Cement can boast that their CO₂ emissions at their Sargberg plant, close to Otavi, are the lowest in Africa and even lower than European Union requirements, making it a flagship to be proud of for the Namibian people.

They also make use of alternative fuels to replace coal in the burning process in its kiln. This is done by purchasing woodchips made from the harvesting of invasive bush species from its sister company, Energy For Future. The company also utilizes excess heat from kiln again to save time and energy in the burning process of raw material to clinker. Thus it is clear that Ohorongo Cement cares for the environment just as much as NamibRand Nature Reserve does, hence the newly formed partnership towards conservation.

As part of the donation a new waterhole, named "Ohorongo Waterhole" was built near the Wolwedans base camp. The reasons for this new waterhole are as follows:

An old waterhole that was located close to the Wolwedans base and airstrip needed to be closed down as animals that were drawn to that were increasingly becoming a hazard / danger for aircraft landing and taking off.

The new site is about 5km away from the airstrip and now ensures that animals no longer present a threat to aircraft making use of the runway.

The new site is close to an existing pipeline, which made the commissioning of this waterhole easier.

The new waterhole was built in partnership with staff from Wolwedans and the NamibRand Nature Reserve.

Permission was recently received from Roads Authority to move a motor gate (cattle grid) to the southern boundary of the Reserve, the newly constructed gate was completed in early 2014. This new gate allows us to remove internal fences which restrict wildlife movement, helping the NamibRand Nature Reserve achieve its dream of a fenceless Namib and realizing our goal of sustainable biodiversity conservation.

An official unveiling ceremony was held at the new Ohorongo Waterhole on Saturday, 1 March 2014, which was attended by representatives of Ohorongo Cement, NamibRand Nature Reserve and Wolwedans.

"We take care....cement is good for durability and sustainability," said Mr Gerhard Hirth, CEO of Schwenk Zement KG, Germany, who represented Ohorongo Cement at the event.

The success of conservation in the area has proven that a sustainable, biodiversity focused land-use can outweigh the benefits of livestock farming and can contribute significantly more to social, economic and environmental benefits. This brings in more money to the Namibian economy and provides more jobs with less impact on the environment.

Carina Sowden



Top: The inaugurated sign to the new Ohorongo Waterhole at Wolwedans.



Bottom: Mr Gerhard Hirth (CEO of Schwenk Zement KG), Quintin Hartung (Acting Control Warden of the NamibRand Nature Reserve) and Stephan Brueckner (MD of Wolwedans) celebrated the new waterhole on the Reserve, proudly built with Ohorongo Cement.

Photos: Carina Sowden

Little 3ugs

New developments and achievements

At the end of 2013, we saw our first Little Bugs graduate and move on to grade 1! We held a little graduation ceremony to



Top: Some of the "little bugs" celebrating their graduation.

celebrate them reaching their first academic milestone.

All three had been attending Little Bugs for more than a year. They were a joy to have in class and although it was very sad to see them go, we are very happy for them as they brave the big world with a more solid foundation in life.

We wish Starlet, Hazina and Richard all the best! We will follow on their progress and we hope they will come back as soon as we are ready for primary education.

Little Bugs Educational Centre received a very generous gift... Funds to begin building our new school! This is a dream come true and the reward of much hard work to provide quality early childhood education and to accommodate more children from the area.

Construction began during the very hot month of January and is progressing well. Our builders are all local and we have plenty of voluntarily input to ensure low costs but a fantastic finish. We hope to be moved in and settled by June.

At the moment the kids are revising the buildings theme we did last year as they watch their new school grow in front of their eyes. On our little outings to discover the world around us, they have had a chance to meet the builders and see what they get up to firsthand. We had a lot of fun making biscuits and lemonade to thank them for their hard work.

Our aim is not only to provide school access to all the children in the area, but to provide an education of the highest standards.

We are grateful to all the various contributors who are helping us to achieve this dream by helping out in whatever way they can. Thank you!

Association of Diplomatic Spouses (ADS) – For sponsoring child size toilets and basins to equip our bathrooms and helping us to tick off one of the measures of excellence for early childhood centers as indicated by the national guidelines.

COV- For sponsoring part of the furnishing for the classrooms. A very generous donation that will ensure that our classrooms are not empty but full of good resources.

Association Andre Roussel – For sponsoring the playground which will allow the Bugs to enjoy their physical development to the fullest in the safest possible way.

We are full of good ideas and will share some pictures with you as soon as the new school is finished!

Join us on Facebook and live this important milestone with us. www.facebook.com/littlebugs.sossusvlei

Andreia Hesemans



Top: The Little Bugs posing with the builders of the new Little Bugs Primary School.

Guide and rangers' corner Rare sighting in the NamibRand Nature Reserve

It is was in the NamibRand Nature Reserve on 22 April 2014, three field guides and I went out to inspect the road to the dump site, about 1.5 km away from Wolwedans village. This was around 17:15 in the evening, the colour was spectacular and the barking gecko was barking trying its best to attract the female geckos.

To our surprise, we came across the very rare and endangered species of Namibia, the male cheetah, I turned off the engine and took out my small Nikon camera, none of us could talk, and we were silent as ice-cold water in the glass.

The cat stood up, looked at us and strolled towards the slope of the hill next to the road where we parked our game viewer; this was a distance of about 40 m away from our game viewer, this is my first time ever to get close to such a distance with one of the beautiful cats in Africa. I took many pictures and every time I took a shot, it seemed like the first shot, that is how excited I got.

This elegant cat, with pretty spots, wonderful colour and amazing background, really gave us the opportunity to spend more then an hour staring at him. He was stretching, yawning and strolling, but I chose this photo as the most picture with a stunning view. This is one of the best sightings in my guiding field. (See Picture on Page 12)

Lukas Mbangu

Wolwedans scoops up multiple 2014 Safari Awards

Thanks to the huge leaps made by Wolwedans Collection of Camps in implementing sustainability goal posts, Namibia once again gains international acclaim as a forerunner in sustainability in Southern Africa.

Wolwedans Dunes Lodge has been awarded the prize of Best Ecologically Responsible Property in Africa by the 2014 Safari Awards. The award catapults Namibia to the forefront of sustainable safari operators in Africa. Wolwedans has already contributed in a major way to putting Namibia on the 'sustainability map' back in 2012 when it was nominated as one of three finalists under the conservation banner for the 2012 Tourism for Tomorrow awards organized by the World Travel & Tourism Council (WTTC).

Wolwedans was also selected as Winner: Best value property Wolwedans Dunes Lodge

And Runner up: Most romantic honeymoon room – Wolwedans Private Camp.

The accolades are particularly noteworthy given the fact that more than 4000 vetted tour operators, travel agents and travel journalists were involved in the voting process. In addition, nominees were selected from more than 1000 luxury travel professionals. The readers of notable publications such as that of Conde Nast Traveler, Tatler, Brides and Travel Africa Magazine all contributed towards the final result.

The awards recognize an establishment's efforts to operate an environmentally friendly business, without compromising on excellent service delivery to clients. Wolwedans, which is situated in the NamibRand Nature Reserve, has been proven to adopt practices which benefit both nature and society, through its use of solar energy, sustainable waste management and the promotion of conservation, Wolwedans was able to come first in the eco-tourism category. For 2014, no other Namibian establishment was accorded a placement with the Safari Awards.

Jana Brückner





'Undefended' – a magical music video shot on NamibRand

On Thursday 3rd April 2014 the brand new Tonetic music video 'Undefended' was launched at Nice Restaurant and Bar. The video was filmed at Chateau Namib and surroundings and features the epic vistas of NamibRand coupled with a perfect acoustic song by Tonetic & Shishani, a captivating duo of Namibian singers - well known for their harmonious voices.

The song "Undefended", which is essentially about love and loss, is a real humdinger and has already been getting a lot of local airplay. Jana Eleanor Brückner, Director and Producer for "Undefended" explains the most important ingredient to making it happen: "I have decided from the beginning that this video is a 'no money production'- not to be mistaken with a 'low budget production'.



Top: Captured moment of the music video "Undefended" by Tonetic and Shishani.

"The magical quality captured in the video comes from the love that has been put into this – from all sides. It was all about the resources and expertise everyone could bring to the party. Talking about money would have taken something away from this...." Nonetheless 'Undefended' would not have been possible without the generous contribution by the NamibRand Nature Reserve and the Wolwedans Foundation, whose 'in kind' support of the logistics and access to one of the most visually spectacular places on this planet have made the project possible.

The Wolwedans Foundation (4C's:Culture) has already been instrumental in the promotion of local musicians by cosponsoring a number of Namibian Music Festivals in the past years.

Cinematography and editing of the 'Undefended' video was done by Liberty & Laurent from Endemic Productions. The video has already made waves across the internet...enjoying over 3000 views on Vimeo in the first two days and close to 1500 views on YouTube!

Jana Brückner

The current status of research on the enigmatic fairy circles

The pace of research into what causes enigmatic fairy circles that are relatively common in Namibian arid grasslands seems to have hotted up recently. Fairy circles are large (approximately 7 m diameter) barren circular patches that occur by the millions along the eastern edge of the Namib Desert. These barren patches are strikingly regularly dispersed within a narrow band about 100 km inland from the coast that is associated with between 52 and 135 mm of rainfall per annum. These circular features have fascinated scientists and the public for several decades and contribute to the tourist appeal of the region. This fascination is of global extent. Google finds over 57 000 web sites mentioning the Namibian fairy circles!

Over the last few years at least three publications have been proclaimed by the media to have found the answer! In January 2011 leakage of hydrocarbon gasses from the soil was suggested to eliminate grasses in the barren patches by Yvette Naude and colleagues at the University of Pretoria. Then in January 2012 carnivorous ants were suggested by Mike Picker and colleagues at University Cape Town to undermine grass roots and result in the death of grasses through dehydration. More recently (March 2013) Norbert Juergens at the University of Hamburg concluded that termites harvest grasses from the barren patches and suggested that this was a type of engineering undertaken by termites to decrease grass utilization of water and make the soil habitat wetter to enable termite burrowing. These gas and faunal explanations are now being challenged by a suggestion of a less direct mechanism that puts the grasses at center-stage.

Based on evidence that the circles appear and disappear, sometimes over just a few years, it was suggested in June 2012 by Walter Tschinkel (Florida State University) that the fairy circles may emerge as a consequence of vegetation patterning. Indeed, vegetation pattern is common in many parts of the world, resulting in clumps, barren spots and stripes of vegetation. These patterns are set up as a consequence of competition between plants for water that results in the spacing of the plants. For example, savannah trees space themselves apart due to competition. However, a savannah tree also provides a habitat for other plants to grow around and under it. For example, the tree may provide shade, food for animals and result in wetter soil under the tree. For example, the tree may provide shade, food for animals and result in wetter soil under the tree.

This "nurses" other plants resulting in plants clustering together in clumps that are separated from other clumps. These patterns are well known to ecologists, some of who have produced mathematical models simulating the emergence of such pattern in vegetation. Such models may also be used to predict the occurrence of barren patches such as fairy circles, as done by Fernandez-Oto and colleagues in June this year. Building on these vegetation patterning ideas, we published a paper supporting the idea that the grasses space themselves apart due to competition (http://goo.gl/0K8jmf). We suggest that the barren circle represents a resource reservoir that provides nutrients and water that the plants on the edge of the barren circle monopolize for their own benefit.

This suggests that the plants may be inadvertently engineering a resource supply that enables grasses on the periphery of the barren circles to grow taller than other grasses.

We do not rule out the participation of ants and termites, but suggest that these are attracted to the barren patch where the lack of plants ensures a greater supply of moisture. We found that the location of the circles was highly predictable on the basis of just three environmental characteristics, one of which was rainfall. As a consequence we suggest that the circles may emerge and disappear in some areas depending on localized variations in rainfall.

We, together with Walter Tschinkel, are planning to follow up this line of research with directed experiments to test the hypothesis that the circles are an emergent vegetation pattern, rather than a termite or ant induced pattern. This involves measuring the flow of water through the soil to see if plants on the periphery of the circles are indeed tapping resources from both inside and outside the fairy circles and whether this could contribute to the size/spacing of the circles. We will also determine whether increased supplies of water (i.e. irrigation), nutrients (i.e. fertilization) and the removal of termites may result in at least partial closure of the circles.

Preliminary investigations were begun on the NamibRand reserve in February 2014 in which we are testing the methodologies to be used, before launching full-scale experiments early in 2015. Quintin, Nils and Vanessa have all been very involved in setting getting this research up and running, and we are looking forward to seeing what the first samples show.









Top, Centre and Bottom: Marked grass samples collected for testing the hypothesis that the circles are an emergent vegetation pattern, rather than a termite or ant induced pattern.

News From Keerweder

This year has seen a lot more rain than last year. The rain season also started earlier, with part of the Reserve, including Draaihoek, Toskaan, Keerweder and Verweg receiving good rainfall in December 2013. Rainfall figures that stood out for the month of December were: Verweg: 45.5mm, Porcupine: 48mm; Quiver tree forest: 44mm, and Draaihoek house: 51mm. For the year 2014, the highest rainfall figures include: Aandstêr: 63mm; Horseshoe: 102mm; Satanskop: 85mm; NaDEET centre: 77.4mm; Wolwedans lodge: 76mm; Draaihoek house; 96mm; Quiver tree forest: 106mm. For the most part, the rainfall on the reserve has been good this year, and very widespread so the animals are able to spread out in search of green pastures.

The "Namib December-January summer heat" did not disappoint with temperatures consistently soaring above 38°c this past summer, along with an ever present afternoon west wind that restricted most of the rainfall to the eastern side of the reserve.

Since the end of last year, various groups of cheetah have been seen on the reserve, including a coalition of five cheetahs at Ysterkop, a coalition of four near Schafsberg, a coalition of six near Bushman Koppies and a coalition of five on Springbokvlakte. The coalitions consisted of mostly males, but sometimes a few females have been seen in the groups. This supports our theory that since the fences, which the

cheetahs used to use to chase and trap their prey in, were removed the cheetahs have had to find another way to catch their pray in this vast open landscape. We believe that they are now starting to use wild dog-like tactics in ambushing their pray in a cohesive manner, thus explaining why we've seen them uncharacteristically in groups so often.

Our resident hyena has stayed around Keerweder and Draaihoek and track and has been consistently seen around in the past five months, and the hyena has been heard calling at night near Keerweder.

Other interesting sightings include a leopard seen by Manuela from NaDEET, jumping over the fence onto Wêrelds end along the Die Duine – Wolwedans fence road. Later, it was reported that Titus, from the Family Hideout, saw the leopard jumping back over the fence from the neighbouring farm onto the reserve. Another leopard was seen at Cheetah Rocks in February.

Our two male giraffe disappeared in November and reappeared in mid-February. They then moved off again in March and were reported to be seen passing through La Motte onto Neuhof. Since then they have been constantly moving between the two Reserves. One of the female giraffe that was relocated to Excelsior had a baby in February. The other female is expected to give birth soon.

We did a bird species count on Friday, 14 March 2014. We did not record as many birds as I hoped we would but it was still a worthwhile exercise to do. We only counted 28% of the birds on our existing list, which is quite low. I think the hot temperatures of the day definitely contributed to that. The good thing is we added two new species to our list, namely, the Cardinal Woodpecker and the Herero Chat. Bird list now at 174 species.



Photo: Quintin Hartung

After the collapse of the borehole at the NR Family hideout last year in November, a new borehole was drilled 100m north of the Stellarine house by Hammerstein Drilling on the 19th and 20th of February 2014. The drilling was successful and the new borehole is in full operation (read more about it on page 5 – Family Hideout news).

The motor gate south of Keerweder on the C27 was relocated to the boundary between the Reserve and Waterkop on the C27 in November and December 2013. Subsequently, the corridor fence on Verweg and Toekoms is in the process of being completely removed. The fence on the western side of the road has been removed and we are busy taking down the fence on the eastern side of the road.

Quintin Hartung



Photo: Quintin Hartung

Top: A sighting of a Masked Weaver at the Draaihoek Waterfall.

Bottom: Guides on the lookout for interesting bird species on the Big Birding Day at Draaihoek.

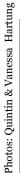
Interesting Pictures







Left, Center and Right: Pictures of the beautiful NamibRand Nature Reserve and its habitats. Pictures with the courtesy of Theo Allofs.





Top: A red hartebeest (Alcelaphus baselaphus) calmly grazing close to the dunes.



Top: A rock monitor lizard (*Varanus albigularis albigularis*) seen on a tree at Draaihoek.



Top: Amazing sighting of a male cheetah by wolwedans ranger Lukas Mbangu.

Thank you

Many thanks to those of you who have contributed to this issue of The Barking Gecko by providing articles/information: Theo Allofs, John Bernstein, Nichole Barger, Beatrice Brock, Jana Brückner, Mandy Brückner, Michael Cramer, Victoria Endjala, Quintin Hartung, Andreia Hesemans, Andreas Keding, Lukas Mbangu, Titus Nangolo, Nils Odendaal, Carina Sowden and Peter Woolfe.

We would also like to thank all those who so generously share their photographs and interesting sightings! Thank you to Ann Scott, for editorial inputs.

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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