

Gondwana TRACKS

PARK
REPORT

OCTOBER - DECEMBER 2013



Dassiepoort waterhole

Highlights

Rain at last

New Mountain Zebra Drive route

Staff children visit Augurabis

Scrap removal continues

Introduction

A few scattered rain showers around the third week of December brought some welcome relief to both man and wildlife, although the high temperatures still persist. This quarter saw the first births of the season among antelope and other animals, but generally speaking the calving is slow and of low numbers. Quite clearly the soaring temperatures, immense evaporation, depleted grazing and very thirsty animals, augmented by the recent large increase in species such as mountain zebra, are significant factors at present, following the recent failed two winter and one summer rain seasons in the GCP vicinity.

The finalization and commissioning of Mountain Zebra Drive for visitor use was a good milestone, and significant progress in the location and removal of scrap metal, old wire and redundant infrastructure was again attained, particularly in the south of the Park.

The wonderfully enthusiastic reaction of the various lodge staff children on their annual outing with Park staff to Augurabis re-emphasised the importance of connecting our people with nature and exposing them to Park activities, and is an exercise that should be repeated more often with the rest of the lodge personnel. Such excursions result in a “win-win” situation for everybody and for Gondwana in general.

Management and Development

A brief summary of tasks undertaken during these three months is as follows:

The 6km walking trail at Augurabis was skoffeled and direction markers were created with the assistance of Windhoek International School staff and students, who then also assisted with the mapping of four klipspringer territories in the same area.

Mountain Zebra Drive (north-west of the roadhouse) was re-routed somewhat to make it more practical, extensive road-repair was effected, and route markers were added. A new brochure with an appropriate map was created, and the drive is now finally open to visitors.



Re-marking Mountain Zebra drive with Zebra hoof prints

All solar panels at every waterhole were cleaned, the solar pump at Steenbok was repaired of a leak, and the pump at Porcupine was removed for repairs and reconditioning. Porcupine damage to pipes at Grenspos and Middelpoos waterholes was repaired, and a troublesome porcupine was captured and translocated away from Grenspos. Springbokvlakte pipeline was re-buried, and Dassiepoort and Klipdam waterholes were cleaned. Klipdam reservoir was cleaned and refilled. At Geluk windpump, a top rod was repaired and a new valve and cylinder washers were fitted.



Transport of old wire back to Hologog



General Worker Leon Jossop cutting up an old car at Altdorn

An old redundant railway reservoir and pumphouse near Park HQ were demolished, two reservoirs and two sheep cribs at Kudugat and near Fourie se Gat were dismantled, and more old wire and rusted reservoir corrugated iron sheets were removed to Hologog from the Brakwater, Altdorn and Quaggagat vicinities. The gum trees at Altdorn were cut down and diesel poured on their stumps to prevent re-growth. At Hologog (Park HQ), a huge hole for the disposal of old wire was covered over and a new one was dug.



Cutting down the gum trees at Altdorn

Professional tilers tiled all the floors in the Wardens' house. Finishing touches were put to the new football field, and the first (inaugural) staff match (Holog/Roadhouse vs Lodge/Village) was held on Sunday afternoon 8th December with 45 people present.

The ageing and troublesome double-cab 4x4 was finally sold, and replaced with an ex-game viewer from Anib, which was then converted to a working field staff vehicle for the Rangers. A second vehicle from Anib was also received, for the Research and Information section under Warden Sue. The remaining single cab 4x4 received a new transfer case and cv joint boot.

Both Wardens attended the NamPlace meeting at Rosh Pinah on 11th October.

Geological technician Chris Kleingeldt was assisted to see EPL 4911 on an initial recce on behalf of Hermanus Grobler, the registered Holder of the "Dimension Stone and Precious Stones" prospecting permit which includes the GCP properties Elizabeth, Ryneveld, Augurabis and part of Stamprivier.

Warden Sue assisted various Gondwana lodge managers to prepare adequately for the EcoAwards. Senior Ranger Eddy Shipulwa assisted with some guiding on the Village walking trail. Sue converted all Incident Book and Game Count maps to the MONAD system, whereby all grid references comply with the national/international accepted method of Degrees and Minutes. Routine work during the quarter included raingauge monitoring and servicing, fence repair, downloading of camera traps at various waterholes, a raptor road count, two quarterly game counts, carting water to Dassiepoort and Middelpoort on a regular weekly basis, boosting water supplies to Geluk and Zebra by generator during wind- calm periods, and tree nursery and HQ maintenance. Admin work included the annual HR, AA and Training reports, contributions to the shareholders newsletter and to a giraffe article, writing the "State of the Park" report, the annual summary of all orders, and formulation of the next year's Budget Request.

Warden Sue and Senior Ranger Gammy Sikongo hosted two groups of staff children from the lodges with a few staff members included (total of 24), at Augurabis for a day and a night.

Law Enforcement



Gin traps

Five small gin-traps were retrieved on 19th October from under our border fence to the east and returned to the neighbour, who apologised for the behaviour of his staff, and offered to step up his share of closing holes and other fence maintenance. Relations are cordial and he remains one of our best neighbours – very cooperative and helpful.

Our Ranger staff under supervision of Senior Ranger Eddy Shipulwa, while doing boundary fence maintenance on the southern border during the 3rd week of October, found the carcass of an ostrich with one leg hacked off; it appeared to have been shot from the main Ai/Ais road. The incident was reported to MET officials at Hobas and Keetmanshoop.

Monitoring and Research

Climate

High temperatures set in early this summer, and 38°C was common by middle of December. Welcome relief came in the form of a few scattered showers towards the end of December, but the heat persists.



Holog river flowing near the Park Office

In October a few localized rain showers occurred, mainly in the south. No rain fell in November, whereas December brought some temporary relief to the pressure on artificial waters with showers falling in all areas of the park and some rivers running for a couple of hours.

Average rainfall for each park zone in December was 22.7mm (North), 31.7mm (Central) and 22.9mm (South). The Park has now received just under a quarter of its average expected rainfall of 104mm and we are half way through the year (measured July to June). Most of the rain tends to fall around February and so we remain hopeful that we may have more rain to report in the next quarterly report.

A total of 33 rain-gauges are monitored in the Park. Selected rainfall data recorded from these gauges during the three month period is given below.

Name of rain-gauge	October (mm)	November (mm)	December (mm)	Park zone
Augurabis (Cañon Outpost)	0.0	0.0	41.5	North
Holoog	0.0	0.0	35.4	North
Cañon Roadhouse	0.0	0.0	32.0	North
Tafelkop	2.0	0.0	9.0	North
Bushman Water	3.0	0.0	31.5	Central
Cañon Lodge	0.0	0.0	17.0	Central
Springbokvlakte	2.0	0.0	19.0	Central
Scorpion Water	1.5	0.0	33.0	Central
Rooiberg	2.0	0.0	32.0	South
Brakwater	3.0	0.0	6.0	South
Fourie se gat	4.0	0.0	4.5	South

The maximum and minimum temperatures recorded for October to December 2013 are indicated below, together with the means for each month (derived from data for 2003-2013).

	October 2003-2013 mean	October 2013	November 2003-2013 mean	November 2013	December 2003-2013 mean	December 2013
Maximum temperature (°C)	36.5	37.3	39.7	39.9	40.4	39.4
Average maximum temperature (°C)	29.6	30.4	32.6	32.8	34.4	34.9
Minimum temperature (°C)	6.7	7.1	9.2	9.3	12.1	12.1
Average minimum temperature (°C)	14.0	12.7	16.8	14.6	18.1	18.7

Table depicting maximum and minimum temperatures from October to December

The last three months have been hotter than average. In both October and November the highest maximum temperatures for these months were recorded, and in all three months the average maximum temperature was above that recorded in previous years.



Likkewaanskop waterhole; the photograph on the left illustrates conditions at the beginning of November. Two Verreaux eagles have plenty of water to drink. On the right, at the end of November, Mountain Zebra are pushing for position at the dry waterhole.

Veld Condition

The grasses in particular have been depleted severely over the past quarter, whereas woody plants have fared slightly better. However the greening up of grass and trees and shrubs has been dramatic following the recent rain, and stimulation of flowering in plants such as *Rhigosum trichotomum* (Driedoring), *R.obovatum* (Karoo rhigosum), *Catophractes alexandri* (ghabbabos), *Parkinsonia africana* (lemoendoring) and *Haematoxylum dinteri* (bloodwood) has been very noticeable within a week following the precipitation. Bushman Candles, *Sarcocaulon patersonii* were also seen flowering on the plains between Dassiepoort and Klein Karios.



Sarcocaulon patersonii



Rhigosum obovatum

Indigenous Plant Nursery

A total of 66 indigenous plants that were cultivated in our Holog nursery, namely *Acacia erioloba*, Hoodias and Quiver trees, were given to the Lodge and the Village during the quarter under review. Seeds from several different species including *Aloe dichotoma*, *Hoodia gordonii* and *Haematoxylum dinteri* were planted by Sue and intern Oliver.

Wildlife and Vegetation

Red Hartebeest, Blue Wildebeest, Springbok and Oryx have produced a few young during the quarter, as have Mountain Zebra and even Ostrich, but the numbers remain low and we suspect that there have been a few casualties due to the intense heat, limited water supply at times, and low grazing quality and quantity. We will have a clearer picture during the next quarter (January - March 2014).

Professor Morris Gosling, who is carrying out long term research on the Mountain Zebra population in GCP, has recently been looking at age-dependent mortality. We would like to thank him for the following report, which summarizes his findings to date.

Age-dependent mortality in mountain zebras

One aspect of population ecology that is critical for understanding variation in numbers is detailed information about age-specific mortality. Of the animals born, how many die and at what ages? The answer to these questions determines the number of animals that survive to enter the breeding population and how long they survive in this key sector. To explore a part of these processes, I have used individual-based information to carry out a number of age-specific analyses of survival in the first 6 years of life. The most

important analyses explore the impact of varying environmental conditions, such as that between wet years and droughts, on different age-classes. The data were obtained by estimating the ages of new individuals detected in a network of camera traps, assigning them to years of birth then estimating the percentage of the cohort that survives in successive years. Differences in survival between age classes can then be calculated in relation to environmental conditions in particular years. The most likely environmental factor to effect survival is variation in rainfall and this is available through the detailed records collected by Park staff in GCP.



Figure 1. Mountain zebra breeding group drinking at Jagpos water hole. Foals suffer relatively less mortality in the first year of life but are at increased risk when they disperse at 1-3 years of age, particularly in drought years.

The clearest relationship between survival and rainfall is that shown in Figure 2 where the % mortality in-between 1 and 2 years in every annual cohort is regressed against total rainfall in the northern region of GCP. The analysis shows a striking inverse relationship between mortality and rainfall (Pearson $r = -0.91$; $p = 0.013$). I expected some sort of threshold in the response but the relationship is linear. Inspection of all year classes gives evidence for higher mortality up to 4 years of age in drought years, most conspicuously 2006-07 and 2009-10. However, while similar trends to the 1-2 year mortality are apparent for 0-1 and 2-3 year classes, the regressions are just not significant and that for 3-4 is not significant, largely because of low sample size and high variation in a single year class (sample sizes decline in the older age classes because the data are inevitably fewer). If it is assumed that the mortality trends identified are meaningful (this will be tested in future years), and all four classes are combined into one 0-4 year class, this yields a significant relationship with rainfall that can be described by:

$$y (\% \text{ mortality } 0-4 \text{ years}) = 54.5 - 0.230x \text{ (where } x \text{ is rainfall in mms). } F = 18.9; p = 0.022.$$

Thus, in very dry years about a half of the animals less than 4 years old may die and this falls to under 20% when rainfall is over 150mm. Further data are needed and the 2012-13 drought will probably yield important information.

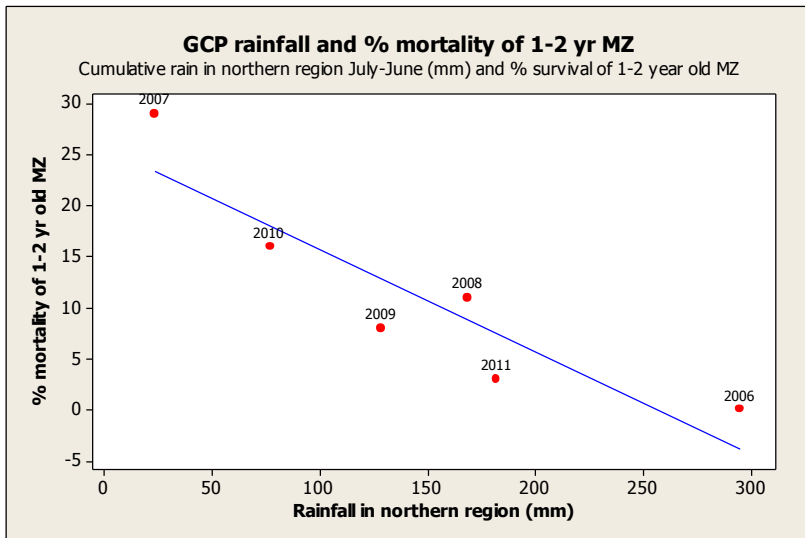


Figure 2. The relationship between rainfall and the mortality of 1-2 year old mountain zebra in Gondwana Cañon Park. Data are from repeat observations of 304 individuals assigned to birth years between 2005 and 2011.

The frequency of mortality in successive years provides an indication of the reasons for these results. In a starting sample of 304 individuals with known birth years, the average loss in the first 4 years of life was respectively 2% (0-1), 11% (1-2), 9% (2-3) and 4% (3-4). No mortality was recorded after 4 years although the sample is relatively small at this stage. This pattern suggests that juveniles are relatively safe for the first year probably while still obtaining a large proportion of their diet from milk and benefitting from the protection of their mothers. Mortality increases as young disperse from their natal groups and embark on the transition to membership of harems (in the case of females) and start the process of competing for high dominance status in bachelor groups in the case of males. Males do not become harem males until they are 6 or 7 years old in GCP so the mortality is not associated with this transition but rather with an earlier stage when they leave their natal groups and start to compete in bachelor groups.

One technical problem in the analysis of survival in the first year of life is that some foals may die before they are recorded in camera trap photographs and such animals will not be added to the individual reference library. Thus 2% mortality in the first year of life may be an underestimate. I will check this in future work by carrying out finer grained analysis of survival in relation to age within the year class and by calculating birth rates from the appearance of pregnant females.

Presumably the main effect on the survival of young zebra is the amount of forage which is known to be strongly dependent of rainfall, rather than the availability of free water. However this may be a little more complicated because temporary pools ('veld water') also allows access to areas of forage produced in previous growth periods that are otherwise inaccessible. The exact processes that result in the deaths of dispersing young animals are unknown. They could involve competition for access to water: camera trap photographs show that overt competition for access to water is common and some young animals have to wait long periods to drink and this could reduce foraging time. Efficient foraging must also be dependent on detailed local knowledge held by adult members of breeding groups and separation from these animals may critically reduce the foraging efficiency of dispersing young when conditions are hard.

Acknowledgements: The results described here were obtained using results from a network of camera traps over many years. I am grateful to Sue and Trygve Cooper, Gammy Sikongo and the other staff at Hologoog for

looking after the camera traps and to Chris Brown and Manni Goldbeck for long term support, advice and encouragement. I am also grateful to GCP for access to the rainfall records used in this work. The Rufford Foundation, the Namibia Nature Foundation and Newcastle University have provided financial and administrative support; the Whitley Fund for Nature made a generous donation to the project and Exacto Engineering in Windhoek donated metal boxes to help protect camera traps from baboons.

L. M. Gosling
Newcastle upon Tyne, UK.
7 December 2013

A Raptor road count took place over the usual route during the quarter. Only two birds were seen although many have been spotted during normal park patrols. Lappet Faced Vultures are being seen most days when driving around Dassiepoort plains, although as yet they are not present in the large numbers that they were seen in last year.

A Quarterly game count was also carried out along routes 7 and 9 of the annual count. All the annual game count routes have been repeated at least once during the year to enable comparisons of game movements at different times of the year to take place. The results are illustrated below.

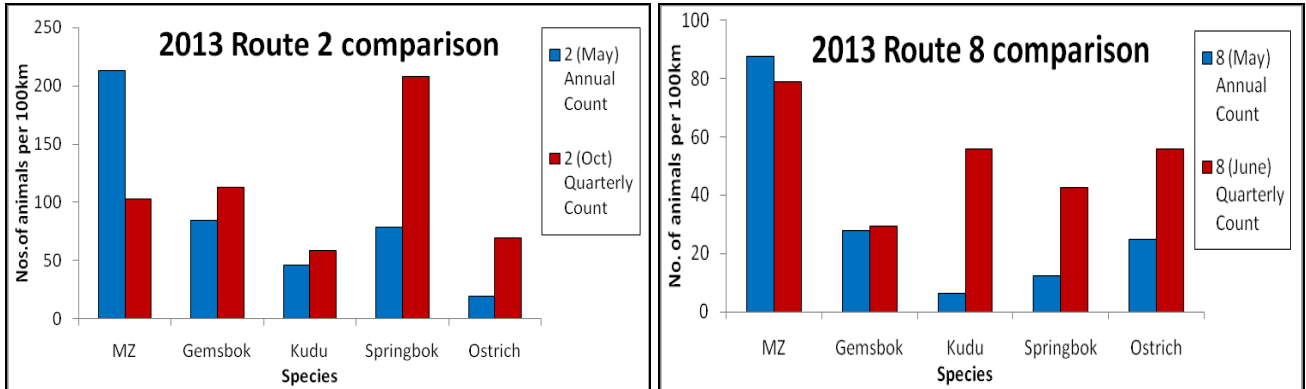
Species. Nos. of animals per 100km driven GCP Annual Count						
Route	Distance (km)	MZ	Gemsbok	Kudu	Springbok	Ostrich
1	46.2	0.0	318.2	19.5	346.3	25.1
2	56.2	213.5	84.6	46.2	78.8	19.2
3	54.0	99.6	285.2	7.8	293.0	35.2
4	53.2	98.1	231.5	5.6	777.8	79.6
6	32.4	146.0	0	43.5	164.6	31.1
7	31.0	271.0	51.6	29.0	22.6	19.4
8	30.5	87.5	28.1	6.3	12.5	25.0
9	23	100.0	0.0	156.5	0.0	0.0
Average no. per 100km		127.0	124.9	39.3	212.0	29.3

Number of animals seen per 100km during the annual game count May 2013

Species. Nos. of animals per 100km driven Quarterly counts						
Route	Distance (km)	MZ	Gemsbok	Kudu	Springbok	Ostrich
1 (June)	46.2	8.7	13.0	6.5	21.6	26.0
2 (Oct)	56.2	102.6	113.2	58.5	208.4	69.1
3 (March)	54.0	55.6	211.1	26.0	233.3	0.0
4 (March)	53.2	24.4	257.5	63.9	82.7	45.1
6 (Oct)	32.4	64.8	3.1	12.3	80.2	64.8
7 (December)	31.0	51.6	41.9	6.5	12.9	16.1
8 (June)	30.5	78.7	29.5	55.7	42.6	55.7
9 (December)	23	65.0	0.0	4.3	0.0	0.0
Average no. per 100km		56.4	83.7	29.2	85.2	34.6

Number of animals seen per 100km during the quarterly counts 2013

Overall, more animals were seen during the annual count than during the quarterlies. This was particularly noticeable for springbok and mountain zebra and may be due to the drought conditions that persisted throughout the whole year, causing animals to disperse to inaccessible parts of the park, or even out of the park to look for food. Notable exceptions to this trend however occurred with the route 2 count (Kanebis and Altdorn areas) in October and the route 8 count (Holoog area) in June. In these two cases (as illustrated below) there were more animals in total per 100km counted and there were more animals (mountain zebra excluded) of each of the listed species counted during the quarterly count than during the annual one. These areas have not been heavily utilized in the past, but with the removal of internal fences (the Holoog area was the last one to be opened up) and the poor grazing and lack of browse in other parts of the park more animals are moving into these areas in search of better conditions.

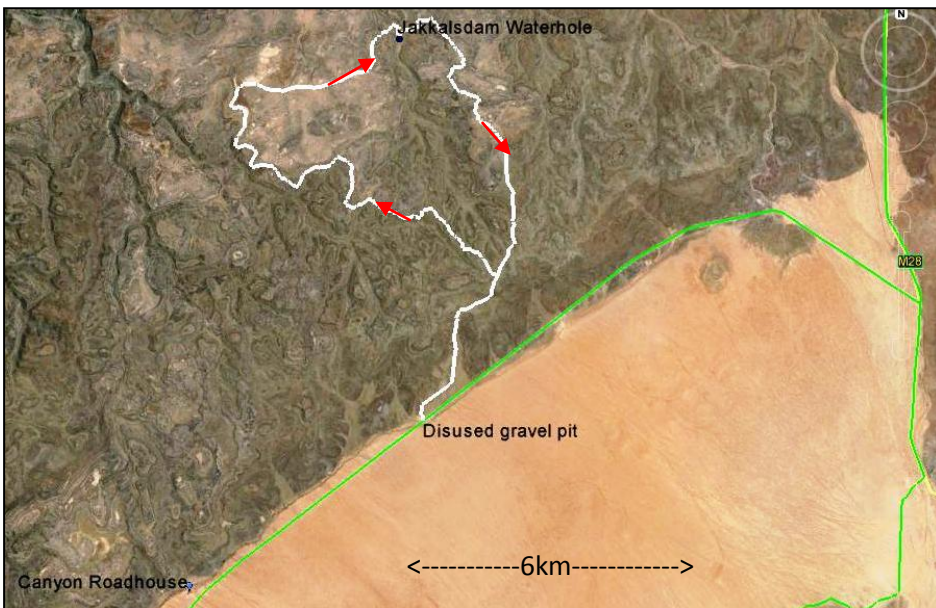


Comparison between the annual and quarterly game counts for two fixed count routes

Giraffe Monitoring

All 13 giraffe released in June are doing well in the !Gab river valley. They sometimes split up but often come together again as one group drinking at Stamprivier waterhole around every two or three days. At the time of writing, one has just been seen exploring in the Geluk area, south east of their release site for the first time. Both Charles Cock and later Ranger Jona Naholo observed it drinking at Geluk waterhole on Friday 3rd January.

Mountain Zebra Drive



A new Mountain Zebra drive circular 4 x 4 route was designed and commissioned. The new scenic 27km route uses part of the annual game count route 6 and passes by Jakkalsdam waterhole, after traversing the edges of many ‘mini canyons’ formed by seasonal rivers flowing westwards into the Fish River. After this, the new route takes tourists into further rocky areas and gives them views over the plains to the distant Holoogberg.

Mountain Zebra Drive

Human Resources, Information and Training

Once again we were pleased to welcome the grade 11 students from Windhoek International School, who spent a week with us, marking the walking trail at Augurabis, mapping Klipspringer territories in the same area and preparing the new Mountain Zebra Drive 4 x 4 route for use. The students did an incredible job, advancing the Klipspringer research by many months and also enabling the new scenic route to be opened just after their visit. We would like to thank them for all their hard work and look forward to them visiting the park again in the future



Windhoek International School

During December Sue and Senior Ranger Gammy took the staff children from Canyon Lodge, Canyon Village and Canyon Roadhouse to Canyon Outpost for an overnight 'Augurabis Adventure'. While they were there everyone went on a game drive, including a successful giraffe hunt in which

all 13 giraffe were seen, they took part in a GPS course and treasure hunt, played Ecoryx card games, went on the walking trail, learned animal facts, completed word searches and improved their swimming strokes. 19 children took part in the two trips, and a total of 5 lodge staff came to help. The trip was very successful and a good time was had by all. Thank you to Mattanja, Anja and Steffi for organizing things from the lodge side and also thank you to Charles for the logistical arrangements.



Staff and children from Canyon Village above the !Gab river



Canyon Village children being shown how to use a rain-gauge and successfully completing a GPS treasure hunt



Canyon Lodge and Roadhouse children on the hiking trail and celebrating being at Augurabis

All three lodges in the Gondwana Canyon Park were awarded five flowers in their recent Eco-Awards assessment. This is the highest level of achievement possible and means that they achieved marks of above 90% when they were assessed earlier in the year. The award is a great reflection of the efforts being put in by park and lodge staff to strive towards high levels of environmental management and sustainable development. In the recently published draft Strategic Environmental Assessment of the Tourism sector in the Greater Fish River Canyon Landscape (GFRCL), one of the recommendations for all tourist establishments is that they undergo Eco-Awards assessments and aim for a minimum standard of three flowers. This is not only necessary for the environment, but is also becoming more important in the selection of tourism destinations by clients. Minimizing environmental footprints and selection of sustainable destinations are now criteria for many travelers when selecting places to stay.

Sue has also been helping all the other Gondwana lodges with their preparations for their Eco-Awards assessments. To date, Namib Desert Lodge has also been assessed and achieved five flowers. The other lodges have all completed their preparations and are now waiting for assessors to visit their lodges.



One important spin-off from a greater environmental awareness in GCP is that there are currently no problems with lodge staff killing snakes and scorpions. There are many of these around at the moment and they are just being removed from lodge areas and relocated elsewhere. One such scorpion was sent up from Canyon Village to the Park Office for identification, before its release back into the environment and was identified as a Rock Scorpion, *Hadogenes phyllodes*. It grows up to 180mm long and has an estimated lifespan of 25-30 years in the wild (Information from 'Scorpions of Southern Africa' by Jonathan Leeming).

Rock Scorpion *Hadogenes phyllodes*

In October Trygve and Sue attended a NamPlace meeting for the GFRCL at which one of the agenda items was the launch of a website for the area. Members of the landscape can submit information to the website and it is available for everyone to view at www.landscapesnamibia.org/fish-river-canyon. One other piece of very pleasing information that came out of the meeting was that some of the Red Hartebeest that were introduced to GCP have been seen moving into the /Ai-/Ais National Park. Surely this is a very good advertisement for the removal of fences and the adoption of co-management land use practices.

Visiting "VIP" Alex Jackson from the UK, who is MD of Kaapstad Motorcycle Tours, was shown some of the Park and introduced to the work Park staff are doing. He was visiting most of the Gondwana lodges to help market the product and maybe get a motorcycle tour going. He also does fund-raising for rhinos etc. in the RSA and UK. He was very impressed with Gondwana's environmental commitment and involvement.

Dr. Ingrid Wiesel from the Brown Hyena Research Fund (of which Warden Trygve is a trustee) visited Park HQ briefly, and was excited to hear that our brown hyena appear to be re-establishing themselves again slowly but surely at GCP.

Professor James Juvik from the University of Hawaii, visiting Fulbright Scholar based at the Polytechnic of Namibia, came for a preliminary visit. He will be back in 2014, when he will be conducting research into Tortoises in the area. He was accompanied by two Research Assistants, one of whom was Liana Mbako, who was our intern here earlier in the year. Another ex intern from the park who is doing well is Philippe Ackerman. He is currently helping out at Kalahari Anib Lodge, where he is doing some guiding. After this he will start his degree in Natural Resource Management at the Polytechnic of Namibia. We wish him well with his future studies.

Our most recent intern Oliver Freyer left in November after much hard work and a very positive contribution to Gondwana Canyon Park. We also wish him every success for the future. Below is his summary of his time spent in the south.



Oliver and Park Staff

I would like to thank everyone at Holoog for being so kind to me and for taking care of me during the three months that I was there. I learnt a lot, and am glad that I could get practical experience in nature conservation.

I can divide my work in the park into three basic categories: going out into the field with the rangers, working in the nursery, and helping out in the office. The work in the field was the most diverse and besides the work that was planned, there was always something unexpected to be done. Planned work included fence patrols, fence repairs, the demolition of buildings, checking rain-gauges, waterholes and camera traps and monitoring wildlife – rhino tracking was probably my favourite activity, and I was amazed how the rangers could follow the rhinos even in rocky terrain. The windmill at Geluk required a lot of maintenance, which was demanding work and lots of patience, but I am grateful that I could learn that way and am happy that it now works. In the nursery at Holoog I planted and transplanted lots of indigenous plants and I really enjoyed it working there. In the office I mostly looked at camera trap photos, and it was very interesting to observe the animals' behaviour at the waterholes, and always exciting to see rare animals make their appearance. From camera trap photos I also identified a few leopards and experimented using a programme to do so, but in the end the computer decided that I can't use the programme, so I did it manually. In everything I did the staff at Holoog helped me and taught me well, and I appreciate the patience they showed when I was working with wire at half the speed of what they could do.

Every day the park offered something fascinating to see, whether it was something odd I've never seen before like an Oryx running away with a bone in its mouth, something that made me understand the environment better like the behaviour and interdependence of landscape, plants and animals, or something familiar and still beautiful, like the same sunset I've seen the days before.

I am very thankful for the office library, from which I could read and learn more about nature. However, I still learnt the most by being outside and in the field whenever I wanted to, and just observe what I saw and experienced there, and I am thankful that I have been given the opportunity to do so during my time in the Gondwana Canyon Park.

I wish you and the park all the best for the future!

Oliver

Two park staff deserve particular praise for their academic achievements recently. Congratulations to Senior Ranger Gammy Sikongo who passed his final exam and now has a B. Tech (Hons.) degree in Natural Resource Management. His degree ceremony will take place during 2014 and will represent the culmination of four years of hard work.



Senior Ranger Eddy Shipulwa privately enrolled himself for a 5-month distance learning general computer course from the National Federation of People with Disabilities in Namibia, which is attached to the Ministry of Youth, National Service, Sport and Culture and passed with good grades.

Eddy with his computing certificate

Ranger Jona Naholo resigned to take an 8-month fireman's course in Windhoek. His family have encouraged him to do so and are sponsoring him. He leaves with a good record, and we hope that he returns to Gondwana again one day. We shall miss him immensely.

Trygve and Sue held a braai at the end of November to thank all the staff for their hard work and dedication throughout the year.

The new football pitch at Holoog (Park HQ) was christened in December with the inaugural match taking place between a team from Canyon Roadhouse and Canyon Park against a combined team from Canyon Lodge and Canyon Village. On a thundery day, an enthusiastic display from both sides meant that the scores were tied at the end of the game and so the tie was decided on penalties, with the combined Lodge/Village team being the eventual winners. The game was enjoyed by players and spectators alike and was marked at the beginning with a minute's silence in memory of Nelson Mandela.



Football at Holoog



Players and spectators

Trygve and Sue Cooper
Park Wardens, Gondwana Cañon Park

2014/01/04

Photographic contributions: J. Naholo, E. Shipulwa, T. Cooper, S. Cooper, M. Gosling, Camera traps.