



KRUGER2CANYON

NEWS

February 2023

The Farm House, R527, Zandspruit, Hoedspruit, Limpopo email: editor@kruger2canyon.co.za

Believed to be a world first – a cheetah’s injured hind leg surgically repaired

Mark Bishop

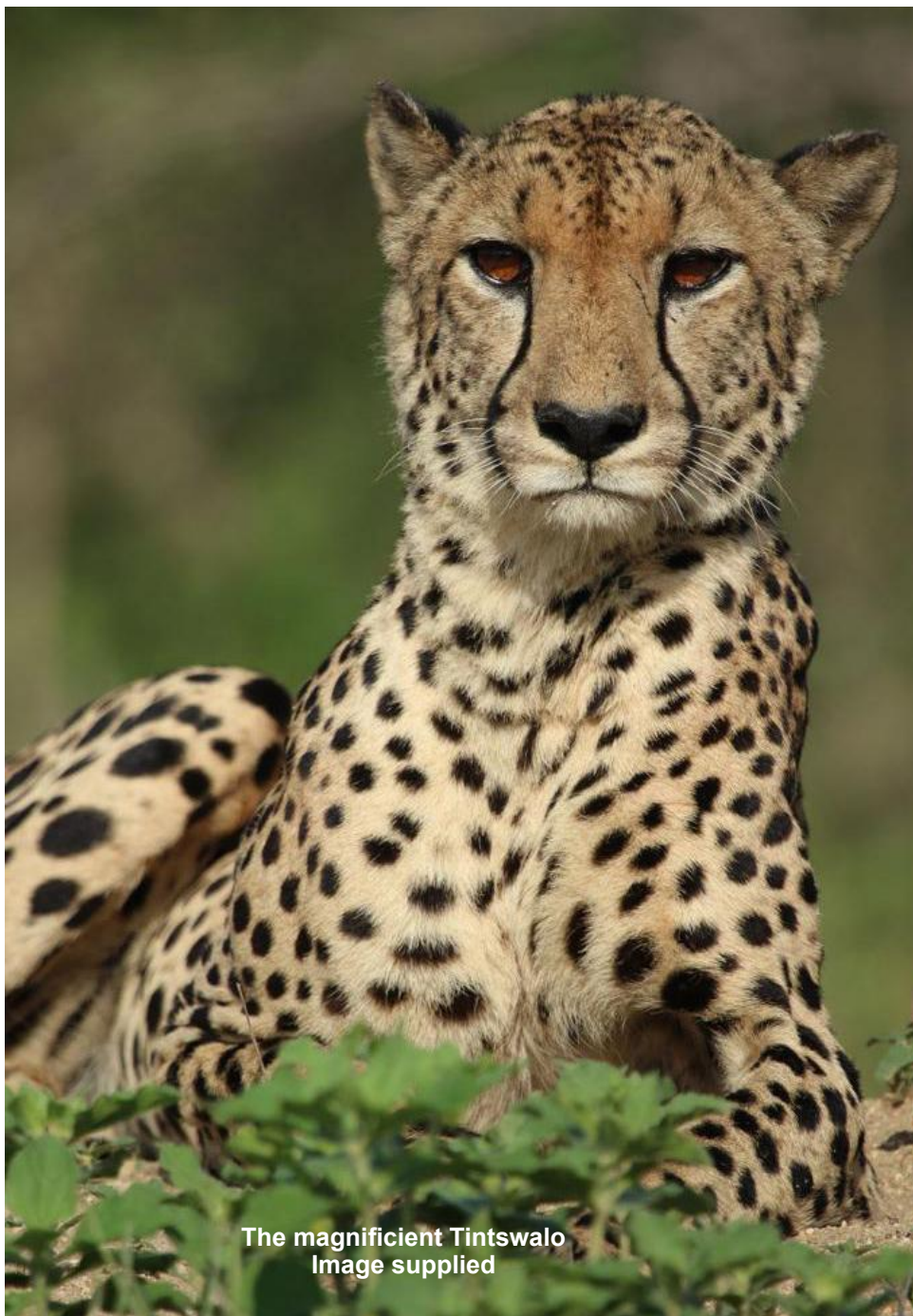
The whole saga began on the Greater Makalali Nature Reserve (GMNR) in early December 2022. A group of volunteer monitoring teams (Siyafunda Conservation and Askari) reported that they had witnessed a cheetah that was losing condition, and was not able to hunt and run down his prey – even young warthogs. He didn’t seem to have the pace.

A vet, Dr Chris (Bossie) Boshoff, was called in by the Warden of the reserve, Antony Collet. The cheetah (Tintswalo by name) was located and darted, and some bite wounds were found on a hind leg that were subsequently treated. After treatment he was released. He was then seen again, sometime later, and it was reported that he was losing condition. The conclusion was that there was clearly more damage that had been done, beyond the bites that had been treated.

The cheetah was darted again and on examination it was found that there was something ‘loose’ in the heel of his one leg. Boshoff immediately put the leg in a temporary fibreglass light weight cast. The cheetah was then put into a safe boma for observation. He was in the cast for almost a month. It was during this period of the cheetah having the cast, that Boshoff started corresponding with a surgeon at Onderstepoort. He suggested that x-rays be taken to ascertain exactly what the problem was.

The cast was then removed, and Jana Meyer of Hope for Wildlife helicopter services was commissioned to fly Tintswalo to the Maroela Animal Clinic in Hoedspruit, so that the necessary x-rays could be done and sent to the specialist at Onderstepoort Veterinary Hospital, outside Tswane (Pretoria).

On examination it appeared that at the heel of the right hind leg, the calcaneus (like a kneecap), was fractured. On detailed analysis of the x-rays, and after delibera-



The magnificent Tintswalo
Image supplied

tion, the veterinarians at the faculty of Veterinary Science at the University of Pretoria, saw a way forward to bring the cheetah back to full health.

The cheetah had to get specialised help

It was suggested (and then approved), that two custom-made plates with the relevant pins be measured from the x-rays and designed, to be inserted and fixed into the “heel” of the cheetah to secure the calcaneus. It must be reiterated that under ‘normal’ circumstances this type of human intervention in the wild would not take place, but because the cheetah was of the ‘home stock genetic pool’, the intervention was deemed appropriate. This process took about 10 days.

The day finally dawned – mention must be made of the scheduling that had to take place around loadshedding, not only for the x-rays to take place, but for the procedure as well!

The cheetah now had to be transported to Tswane for the operation and then transported back to the reserve for rehabilitation – a 90-minute flight either way. Thankfully help was on hand and Tintswalo was flown by helicopter to receive his treatment.

On Tuesday 7th February, at the University of Pretoria faculty of Veterinary Science, and in what is believed to be a world first, two custom-made plates and pins were successfully inserted into the back leg of the cheetah, in an operation that lasted an hour.

Once completed, the healing process had to begin. Tintswalo was flown back to the reserve and put into a “boma”. It was good to see Tintswalo back, and safely in the one hectare enclosed and protected area within the reserve. Dr Boshoff will be checking on him at regular intervals to monitor the progress and condition of the cheetah, together with the assistance of the warden of the GMNR, Antony Collett.

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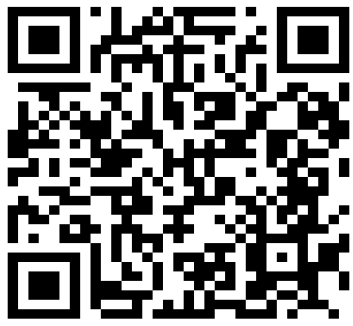
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From the editors desk...



What a February we have had! EishKom continues to deliver its conundrum of load-shedding schedules (if there is a schedule at all), whilst nature decided to deliver her input with a deluge of rain (much needed, but wow) with its associated issues – more potholes, delays in production (especially the road to Eastgate) and of course flooding – which had me stuck at home for three days. And the rain did not cease there ... seems we are heading (as I write this) for a piece of cyclone 'Freddy'. But on the positive side, it's so needed, and to see the revival of the bushveld at this time is quite magnificent.

The 'raved about' R40 intersection and the Berlin development seems to have gone quiet – and we haven't seen the promised press release from the developers of the mall. What we have seen is progress on getting the Eastgate road repaired – but note - ONLY as far as Eastgate and no further. You would think? Right?

I'm no engineer but I saw the 'methodology' – to be honest, I have not seen cement

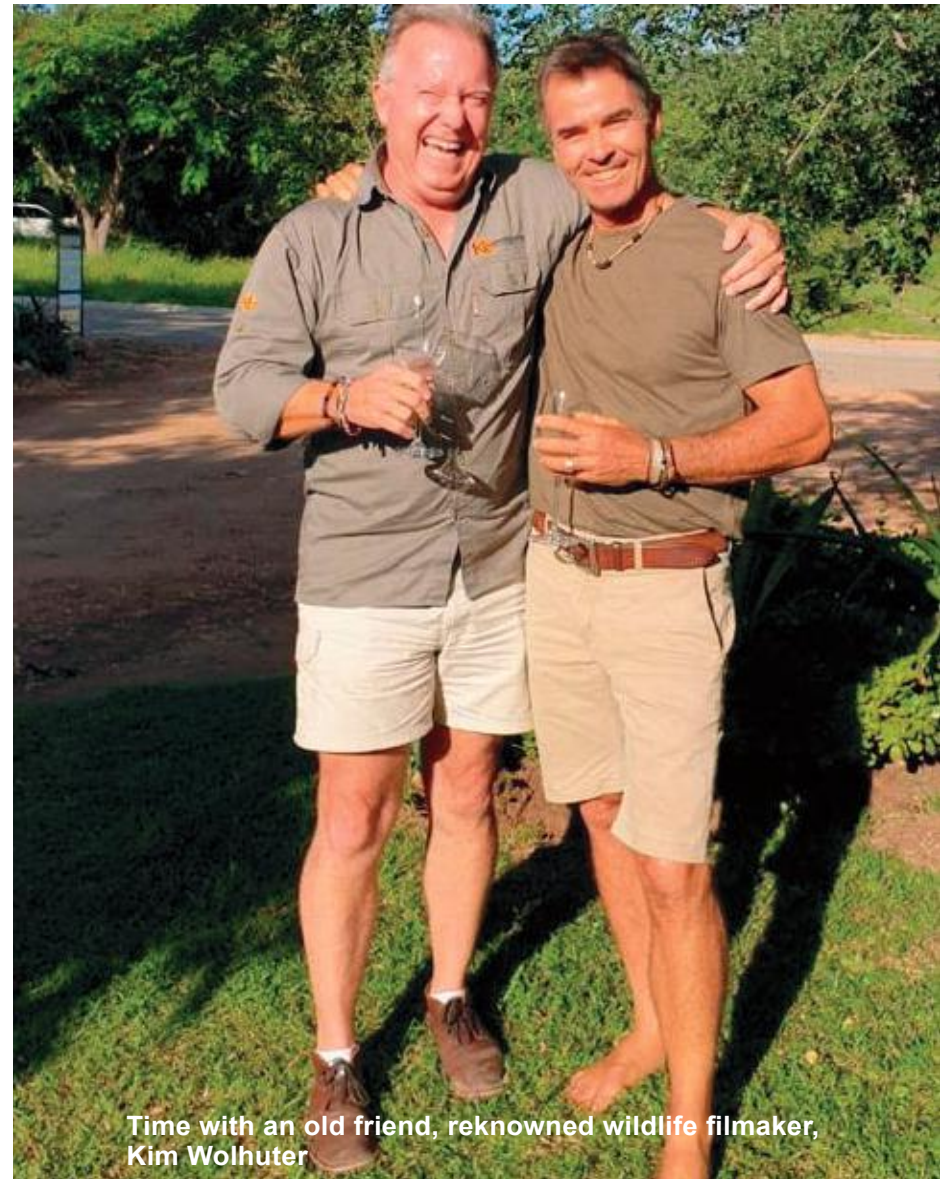
in that quantity being used to create a road surface (and mixed with soil)? I might be wrong, but instinct tells me this is a very short-term solution – I hope I am wrong, and if anyone can shed light on this, please do.

Then I heard about the air force base – oh my goodness, shock, and horror – not one serviceable aircraft, on a base created to land a space shuttle! The base falls under the Department of Public Works ... where is the Department of Defence? Avgas being transported to bases in Pretoria because of a lack of fuel there. Really? If there is such mayhem in the air force (added to Transnet, SAA, Eskom, etc. – has any state department survived?) my question then is that if this is all going on, is the safety at the base up to speed for commercial flights landing there? I'll try get an answer out of the air force 'corporate communications department' and see where that leads us.

No 'Spotlight' article this month sadly – the rain put that one on hold. I am trying to get a geologist to contribute information about this area, but as I understand it, it is not easy to talk in layman's terms about a 3,4-billion-year process, all squashed up into 1 000 words every month!

I do hope you enjoy the read and thank you for your support. Special mention and thanks must go to the two fine fellows, Marlvn and Thabo, that brave the blistering sun to hand out the papers to so many people, at the stop street opposite Kamo-gelo Centre.

Until next time.



Time with an old friend, reknowned wildlife filmmaker, Kim Wolhuter

Letters to the Editor

Dear Editor,

Thank you for a wonderful publication.

As a relatively new resident in Hoedspruit (the last 10 years), I would like to express my concern at the resistance to change that is so prevalent in this town. It bothers me that so many are hell-bent against it, albeit that it is part of the cycle of life. There is continual change happening all around us, all the time, even right under our noses.

I live in an estate (no names no pack drill) where change is frowned upon and viewed as a disease of the 'new generation' and not to be considered. It is such a pity.

Most people are happy with cell phones – that was change, most are happy with TV – that was change, most are happy with air-planes – that was change, now electric cars – that's change, and so on and so on. That is inevitably our lot on this planet – change. If it was not for change, we would still be swinging in the trees! What fun that would be.

Come on people, we're better than that. Let's embrace change and get down and move into the future, not lie back and rot into a 'poor insignificance' because of some pettiness against change. Grow up!

Cheers CRIHE (Concerned Residents In Hoedspruit Estates)

Ed: Hi to all concerned residents, I agree change is essential in life. I also agree that our investments in Hoedspruit need to be looked after and need to appreciate. I suggest you get onto your committees and boards and get active to promote change. It is needed.

Dear Ed,

Would it be possible to a geographer or climatologist to explain the weather to us? I find that your articles are so informative, and it would be great to learn a little more!

Regards Tony

Ed: Hi Tony, I think that's a great idea – I'll see what I can do, but of course we are space dependent which always has its issues. Thanks you for your support.

Hello,

As a tourist to your great town, I was wondering why there are no taxis in town? Would this not be a good idea?

Thanks you, Joost

Ed: Hello Joost, I believe it is a matter of economics – not really enough passengers, short distances ... I believe that is the reason. I do hope you enjoyed the walk around town though.

Dear Editor,

I came to your offices at the Farmhouse the other day, but you out on location. I wanted to ask you when the Radisson was opening and what happened to The Farmery? Please can you shed some light on this for us all?

Regards Chantel

Ed: Hi Chantel, I have asked the head office of Radisson Hotels about the opening but have not had any answers as to the target date. It would be great if someone had any knowledge thereof, to share with us. On The Farmery side, the restaurant has been taken over by new owners and I am advised that the opening will be around the 3rd of March – so make sure you get here!

Ed: Not sure why I am getting asked, but the FGASA offices number is 011 886 8245 – this will go through to the offices in Hoedspruit, alternatively the website is www.fgasa.co.za



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SUDOKU

INSTRUCTIONS

Use the numbers 1 to 9 to complete the Sudoku. Only use each number once in each row, column and grid.

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Believed to be a world first – a cheetah’s injured hind leg surgically repaired



Cont. from page 1

A world first and time for rehabilitation

To everyone’s knowledge, this is the first time this type of surgery has been performed on a cheetah, so the success of this procedure is not guaranteed. The recovery and re-conditioning of the animal is critical in giving him the best chance of a full recovery going forward. Specialist vet surgeon Dr Ross Elliot, is optimistic and hopeful, and the prognosis seems to be positive at this stage. “If you don’t try, we’ll never know”, he said.

Tintswalo was born in June 2014, in the wild and on the reserve. Now over eight years old, the fact that he is still around, is nothing short of amazing. Lions are the kings here, and for him to have survived this long, speaks loads for his ‘lion savvy’ and knowledge of the area. Makalali is home to six of Africa’s large carnivores, and this has been his hunting ground from birth.

His late mother Kusala (meaning ‘skillful’) was killed by lions after having raised two cubs, one being Tintswalo. Sadly, his sibling was never seen again.

As Makalali is part of The Cheetah Metapopulation Management Project, coordinated by the Endangered Wildlife Trust, the next step is to locate a female. Then in a separate, lion-free area of the reserve, the aim is to release the two together and hope the two will pair up, and produce cubs that will obviously be raised on the reserve.

The logistical support surpassed all expectations

This whole logistical and medical operation would not have been possible, save for the overwhelming outpouring of support, time, and donations from a very special group of people and organisations. Firstly, Blume Exklusiv, who started the fundraiser under Rhino Revolution Europe.

Special mention to Dr Boshoff, who alerted the reserve to the situation and who donated his time and expertise to the project, and coordinated all the logistics.

Without Pieter Vorster from Mahela, the whole project would not have taken shape. Mahela forms part of BJ Vorster Citrus, and it was them that flew the cheetah to Onderstepoort, and back to the reserve after the operation.

Recognition must be given to Antony Collett and Richard Sachse (monitoring) from Makalali, for all their daily time and effort in looking after the cheetah in the boma, ensuring his safety and wellbeing.

For sure there were others involved, some with knowledge and insights that were imparted across the group, and this helped immensely in the overall success of the project. This will all certainly help in any future endeavours of this kind that must go down as a world first!

The GMNR is just outside Gravelotte in the Limpopo Province of South Africa. It nestles in the triangle between Hoedspruit, Phalaborwa, and Tzaneen, and overlooks the northern Drakensburg mountains. Thankfully likeminded people got involved the early 1990’s in purchasing and attempting to bring back this wonderful area of bush,

to its natural form and beauty. This, after the decimation of wildlife from hunting in the mining ‘rush’, the 1940’s DDT spaying, attempts at cattle farming, overgrazing and poor land management. A reserve was finally created to promote the conservation of the land and wildlife within its boundaries.

The history of a reserve created

The first properties making up the reserve (originally 6 000 ha) were purchased in 1994, and the reserve has subsequently expanded to its current size of 25 000 ha. Fences have been removed to create a wonderful conservancy allowing the game to traverse the entire extent of the reserve.

Today it’s another story – good wildlife management, reintroduction of animals and development and monitoring programs, have all contributed to the resurgence of this reserve as one of the better maintained and managed reserves in the area. In fact this area has been pronounced as a protected nature reserve with national status.

The reserve is now home to the Big 5, with previously extirpated species including lion, elephant, rhino, hippo, cheetah, hyena, and disease-free buffalo, being reintroduced. Leopard, brown hyena, and the smaller mammal species, as well as the endangered ground hornbill, and the many threatened and endangered vulture and raptor species, are present on the reserve.

Listening to this whole adventure, I was struck and amazed at the total dedication and concern of all involved. It is quite

amazing that so many people give of their precious time and efforts in giving to the preservation of our wildlife for us, and the generations to come.

Currently, Tintswalo is doing well, but there is a long time to go before he is released into the wild proper.

The operation (above left), work in progress (middle), surgical view of the plates (above right).

Xray showing plates (below).

Images supplied by GMNR



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Veggie Diva and her braai vegetables

South Africa is synonymous with the “braai”, and with various cuts of meats marinated and spiced and lovingly turned over hot coals. But what if you are not a big meat eater, what are you going to eat at your next braai? Here are two beautiful and very simple vegetable options that I think even most meat eaters will thoroughly enjoy at a braai.

Grilled Aubergine

- 2 x aubergines
- 2 x garlic cloves
- Olive oil
- Salt pepper

Cut the aubergines length ways into two “steaks” cutting the skin side off both. Score the steaks diagonally both ways. Crush the garlic and mix into 5-6 table-spoons olive oil.

Generously brush the oil on both sides of the aubergine and season with salt and pepper.

When your fire is ready place the steaks over the coals for 10-15 minutes each side. Aubergines should be lovely and tender right through. Serve with lemon wedges.

Grilled spiced cauliflower

- 1 x head cauliflower
- 2 x table spoons curry powder
- Olive oil
- Salt pepper

Cut the cauliflower into quarters or large florets. Mix a generous amount of olive oil, curry powder and salt and pepper together. Put the cauliflower and curry mix into a plastic bag and roll around until cauliflower is covered.

Cook over coals turning regularly until tender and gently chargrilled. Serve immediately



Grilled aubergine (above left) and grilled spiced cauliflower (above right)

The Picky view...



February is now done and dusted, and 2023 is racing ahead at pace.

This month I was lucky enough to have been able to sample the fine cuisine at the Stoned Olive. I immediately liked its kind of ‘happy-go-lucky’ ambience – all that was missing in was a beach and the reggae music! I loved the very relaxed atmosphere, the music (there was some reggae, I think) was great and at exactly the right volume. The restaurant is certainly not trying to be something it is not, and I thoroughly enjoyed that and lounging under the trees and eating good food and quaffing a good glass of wine!

We tried a variety of the fare on offer, and everyone was suitably impressed. The waiter was knowledgeable and very accommodating, and the orders were checked and taken correctly and were all ‘brought’ out at the same time.

The Mango and Haloumi salad was so deli-

cious that we came back for a takeaway of the same dish some three days later! It was substantial and well presented. The mango was sweet and the haloumi salty, the rest was crunchy, and the Thai dressing did the job of rounding off a great dish.

The toasted chicken mayonnaise sandwich MUST surely go down as an iconic Hoedspruit ‘must-have’. It was perfect in every way and again delicious. Most importantly the bread was not cut too thin which is where most restaurants fall foul of a great toasted sandwich.

The beef noodles were substantial, fresh, and not greasy and the beef was tender. Certainly, a wholesome meal on its own.

We did sample the vegetarian pita. There was ample haloumi, the fresh vegetables were scrumptious, and the accompanying chips (double fried) were ‘woofed’ (some people say ‘woofed’) up in no time by all.

Next was the mushroom and haloumi burger – tasty, tender. Good eating for good value.

The Moroccan chickpea dish (which I was recommended), I chose with no phyllo pastry, and it was very good. One of us had had this dish before and confirmed that it was good to see consistent quality coming through the kitchen and being maintained.

One of the specials of the day was the chickpea and basil pesto dish – this was fabulous. Filling, tasty, fresh, and easy eating. The tzatziki garnishing completed and rounded off the taste sensation.

And now we come to the troublesome dishes – oh my goodness ... the lemon meringue pie was on another level. It dawned on me that delicious deserts are what has contributed to the exponential growth of my girth over the last 10 years! This was a serious contributor. It was tangy, light, and

Beef noodles (far left), chicken mayo toastie (above left) and the ultimate lemon meringue pie (above right)

fluffy, and the base was beautifully ‘buttery and biscuity’.

Then there was the chocolate Amarula fudge cake – the chocolate centre flowed with taste and wonderful consistency. Again, far too much consumed, far too quickly, and the ice cream accompaniment was delicious.

I will certainly come back – such a pity the Stoned Olive is not open in the evenings (except for Friday) – and the specials board is a nice detraction from the main menu. Well done to Louise and team! I believe the ‘new’ chef has been on the pans for some three months! I look forward to tasting his/her offerings in six months’ time, and he/she is most definitely a keeper.

Until next month, salivate, savour, and scoff!



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INGWELALA, GREATER KRUGER R 5 950 000
Beds 6 | Baths 3.5 | Floor size: 450m²

50 % Share - There is no better investment than Big 5, Greater Kruger properties. This is one of the largest homes at Ingwelala which can accommodate up to 12 people. The house comes furnished and equipped and includes a 50% share in the Land Rover game-viewer.

Yvette Thompson - 083 655 7176 Ref: 2102135



HOEDSPRUIT WILDLIFE ESTATE R 4 850 000
Beds 4 | Baths 4.5 | Floor: 181m²

This is your opportunity to purchase this newly renovated home on the greenbelt for you and your family. There are spacious living areas that include 2 private patios, looking out towards the greenbelt, an established garden, pool, fence and motorised gate. B&B/Guesthouse potential.

Mike Dodds - 082 906 7004 Ref: 2103300



MODITLO ESTATE R 4 800 000
Bedrooms 3 | Bathrooms 2 | Floor size: 354 m²

This well-kept home is located in the Riversdale portion of Moditlo. The property is located on a quiet street with beautiful mountain and bushveld views. The living area leads out onto the patio, creating a wonderful indoor/outdoor living experience. A walkway leads to the boma area.

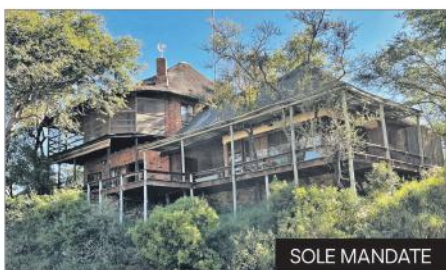
Michelle Severin - 083 469 3821 Ref: 2103013



RAPTORS VIEW WILDLIFE ESTATE R 5 200 000
Beds 3 | Baths 3 | Floor size: 210 m²

This home is in excellent condition and offers a turn-key solution. It comes fully furnished plus a traverse right on Khaya Ndlovu. The open plan kitchen, lounge and dining room all have direct access to the covered patio, with pool and boma.

Yvette Thompson - 083 655 7176 Ref: 2093300



NDLOPFU, UMBABAT R 11 500 000
Bedrooms 4 | Bathrooms 3.5 | Floor size: 240 m²

The house is privately situated on the banks of the seasonal 'Tsiri river. Ndlopfu is a share block in the heart of a Big 5 Greater Kruger, with only 32 member sites on 2,500 ha of pristine bushveld in the sought-after Umbabat Private Nature Reserve.

Yvette Thompson - 083 655 7176 Ref: 2032793



KARONGWE - BIG 5 R 8 900 000
Bedrooms 4 | Bathrooms 4 | Traverse: 8,000 ha

Be one of 14 private owners within Karongwe Nature Reserve which offers pristine game viewing with 4 seasonal river systems. The home is situated on a dry riverbed and comes fully furnished. Harvey tile roof for lower maintenance.

Rob Severin - 083 469 3820 Ref: 2063307



MAKGOKOLO PRIVATE GAME RESERVE R 5 000 000
Floor: 297m² | Stand: 1.5 ha

This site is situated in a 2,500 ha reserve which was previously used as a conference centre. The infrastructure can be converted to a spectacular private lodge at modest cost. The reserve has a private airstrip, photography hide & picnic spots.

Rob Severin - 083 469 3820 Ref: 2088781



NDLOPFU PRIVATE NATURE RESERVE R 7 600 000
Site: 10,000 m² | Reserve: 2,500 ha

This vacant site in Big 5, Greater Kruger allows you to build your own exclusive bushveld getaway with traverse over the reserve and a neighbouring farm. Membership is limited to ensure the exclusivity of the Ndlopfu Share Block.

Yvette Thompson - 083 655 7176 Ref: 2072996



GRIETJIE, GREATER KRUGER R 8 800 000
Big 5 | Floor size: 400 m² | Stand size: 21.4 ha

This property offers elevated views of the surrounding bushveld, with peace and quiet only the bushveld can provide. This beautifully maintained property offers 3 dwellings - a 3-bedroom main home, a 2-bedroom cottage and a rondavel.

Yvette Thompson - 083 655 7176 Ref: 2050020



GREATER MAKALALI R 20 000 000
Bedrooms 5 | Bathrooms 5 | Farm size: 640 ha

This farm within Greater Makalali Nature Reserve, which has the Big 5 with 20,000 ha of traverse. Approvals in place for 10 commercial beds. There is a main 2-bedroom home and 3 guest chalets. Ideal for syndication, families, or convert to boutique commercial lodge.

Jason Jones - 083 267 4794 Ref: 1459112



HOEDSPRUIT WILDLIFE ESTATE R 1 200 000
Stand size: 4,900 m²

Vacant stand available on the ever-popular Hoedspruit Wildlife Estate. With the estate almost fully developed, vacant sites don't come onto the market often. Don't miss this opportunity to secure your stand now.

Yvette Thompson - 083 655 7176 Ref: 2078050



NDLOPFU - Greater Kruger R 13 000 000
Bedrooms 4 | Bathroom 3 | Floor size: 350 m²

This large home is situated in the exclusive Ndlopfu Private Nature Reserve. The home is privately located overlooking the 'Tsiri river. Sold fully furnished and including a game viewer. Solar power backup and recently redone thatch.

Mike Dodds - 082 906 7004 Ref: 2063033



LISSATABA R 2 995 000
Bedrooms 3 | Bathrooms 3 | Floor size: 220 m²

Stunning Olifants river views! This newer home has been well constructed, is in good condition and is perched on the hillside overlooking the river. There is an open plan kitchen, dining room & lounge, leading out to a patio with gorgeous views.

Rob Severin - 083 469 3820 Ref: 1458608



NDLOVUMZI R 3 750 000
Bedrooms 4 | Bathrooms 3 | Floor size: 380 m²

This 21-ha Olifants river property has a 2 bedroom main home and a separate 2-bedroom cottage, all located under large indigenous riverine trees. The outdoor entertainment area has captivating views of the garden, pool & river.

Jason Jones - 083 267 4794 Ref: 1459005



MAFUNYANE, KARONGWE R 15 000 000
Bedrooms 4 | Bathrooms 4 | Traverse: 8,000 ha

This property is stunning and has a wow factor that will take your breath away! Very exclusive, modern bush home, overlooking a seasonal river bed, located in a Big 5 reserve with 8,000 ha traverse. Sold furnished & including game viewer.

Rob Severin - 083 469 3820 Ref: 1443333



OLIFANTS RIVER PROPERTY R 4 500 000
Bedrooms 4 | Bathrooms 4 | 50% share

By purchasing this 50% share in Parsons Nature Reserve you will have access to 2080 ha of prime Big 5 game viewing in Greater Kruger. This quaint bush home also has a lapa, pool and lush garden. The sale includes the use of a game view vehicle.

Mike Dodds - 082 906 7004 Ref: 2048251

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Wildlife baron invites investors to lock, stock and

Tony Carnie

Thirty years after embarking on a speculative – and controversial – wildlife industry venture, the owner of the world’s biggest privately owned herd of rhinos has announced plans to sell up.

The South African rhino baron John Hume, now aged 81, issued a recent media statement inviting investors to purchase his “Platinum Rhino breeding and conservation project” (and all 2 000 rhinos) at an online auction to be held in mid-April.

Hume has been cast variously as a “remarkable conservationist” and also as an avaricious speculator who helped to fuel continued global demand for black market rhino horns.

Hume has pushed strongly to overturn the 1977 global ban on rhino horn sales, arguing that there would be no need to kill any rhinos if their horns could be harvested on a regular basis, and then sold legally to buyers in the Far East.

But with anti-poaching and breeding costs mounting steadily, Hume appears to have taken a business decision to pack up his rhino breeding business for good, hoping that wealthy investors or philanthropists will see some merit in keeping his venture alive - either for similar commercial reasons or to ‘rewild’ them.

Five years ago, Hume invited investors to take up to a 50% interest in his 8 500



Some of John Hume’s nearly 2,000 strong herd of semi-wild rhinos are fed with supplemental feeds during the dry winter months at his 8,500 hectare ranch in North West.
Photo: Tony Carnie

hectare rhino breeding ranch in North West - but there were no takers.

In 2019, he put up a separate property (Mauricedale Game Farm near Kruger National Park) for auction to defray his costs, but not a single buyer came forward when the auctioneer opened the bidding.

His previous attempts to sell a small portion of his massive stockpile of rhino horns in an online auction in 2017 also fell pretty flat, as buyers clearly saw little merit in purchasing horns legally in South Africa when they were prevented from selling them onto

buyers in China, Vietnam or elsewhere, due to an international ban by the Convention on International Trade in Endangered Species (CITES).

Though Hume won a significant court battle in 2015 to overturn a government ban on the domestic sale of rhino horns within South Africa, his more recent forays in the courts have been less successful.

In 2021, Hume sought a court order for the return of nearly R 10 million worth of horns, which had been seized by the police in an undercover operation by the Hawks, dur-

ing an investigation into black market rhino sales by Hume and other parties.

Two men, Clive John Melville and Petrus Steyn, pleaded guilty and were convicted on charges of engaging in restricted wildlife activities without permits – to wit, possession of 181 white rhino horns that originated from Hume’s secure banking vault in Centurion, Pretoria.

Hume denied any legal wrongdoing in the affair, and sued to have the horns returned to him, but Acting Judge SK Hassim found it hard to swallow his story, that he had released the horns from his banking vault to a certain Mr Allan Rossouw of Port Elizabeth – a man he had never met – as part of a legal domestic rhino horn transaction.

Counsel for the Hawks, and a senior police investigating officer, told the court that Rossouw never intended to buy the horns, and had merely agreed to have the sale permit registered in his name in exchange for cash.

“This and the other strange features of the transaction between (Hume) and Rossouw,” she argued, “show not only a sham transaction to disguise the illegal sale of the 181 horns, but they show (Hume’s) complicity.”

“It was submitted that, in the circumstances, the 181 horns should not be returned to (Hume) before he has explained his involvement and his conduct, and that the proper forum for this is not a civil court, but the criminal court,” Hassim declared in a judgment in January 2022.

Cont. on page 7

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barrel sale of his rhino conservation initiative

Cont from page 6.

“(Hume’s) version of events strikes me as most bizarre. It is astounding that a self-professed businessman would voluntarily release valuable assets, such as rhino horns, from his control and custody, entrusting them to a ‘potential buyer’ he has never personally met, for inspection, in the hope that the potential buyer becomes a buyer of the 181 horns at a reasonable price to be agreed. It defies logic why the potential buyer could not inspect the horns at the Centurion vault...”

“It is implausible that any person, let alone a self-professed businessman, would release from his control and custody not a few, but all 181 horns, each valued at around R60 000, to a potential buyer without any assurance that the potential buyer intended buying one of them, let alone 181. This scenario borders on the preposterous.”

Hume also lost another civil case in 2020 where he took on national Environment Minister Barbara Creecy, in a case where he was refused permission to sell and export 11 rhinos to a Vietnamese buyer.

Now Hume has averred that he wants to pack up his venture for good and look for a buyer “with a passion for conserving rhinos and the means to keep the breeding project going”.

He argues that his venture has the potential to “save rhinos from extinction”.

“With 200 rhinos born a year, the project has the power to make a significant difference and bolster declining rhino populations on the African continent.”

“We have so much rewilding power here,” the project’s wildlife veterinarian, Dr Michelle Otto, said in a statement.

“The project’s rhino could repopulate the whole of Africa, where we lose hundreds of rhinos each year to poaching. We have rewilding partners on board, but the project needs funding and it needs the right person to continue to drive it in the right direction.”

That might seem like a tall claim to make, but in the context of the unrelenting massacre of South Africa’s national rhino herd, it’s worth noting that Hume’s project has preserved at least 2 000 rhinos - just slightly fewer than the remaining population of rhinos in Kruger National Park.

Over the last decade, South Africa has lost close to 10 000 rhinos to poachers - mostly in state or provincial parks.

Doctor John Hanks, a zoologist with a PhD from Cambridge on elephant population dynamics, and a former director of the Africa Programme for WWF International, has provided a strong endorsement for Hume’s Platinum Rhino venture.

“This is an outstanding contribution to the long-term security of the species, for which (Hume) deserves an enormous vote of thanks and appreciation from the international conservation community. This remarkable success could not have been achieved without an unprecedented level of financial support, all of which has come from John’s life savings.”

“Protecting rhinos in today’s world from the increasing attacks by poaching gangs is an extremely expensive operation, as all the government conservation agencies in Africa know only too well.”

Doctor George Hughes - a veteran conservationist and former chief executive of the Natal Parks Board/Ezemvelo KZN Wildlife, who favours a legal trade in rhino horn - said that Hume’s decision to put his rhino breeding enterprise up for auction was likely to be a “great disappointment to both John and to rhino conservation.”

“I know that John was often criticised. But he should have been awarded a Nobel Prize for rhino conservation, whatever his motives. He has looked after a significant portion of the world’s rhino population at his own cost.”

“John could be a different customer, but the effort he has made to look after his animals is admirable.”

On whether he thought a buyer might appear to rescue Hume’s breeding project, Hughes said: “I honestly don’t know... It might be picked up by someone in Europe or the USA ... someone like Elon Musk, possibly.”

The flipside, he suggested, was that Hume could be forced to sell off his rhinos cheaply to defray expenses - or be compelled to ‘surrender’ them as part of a government scheme.

He said that while it had become fashionable for animal rights groups to oppose the hunting or sale of wildlife, the private sector had made “a fantastic contribution to rhino conservation”, notably in South Africa, Kenya and Namibia.

Our *Burning Planet’s* initial attempts to contact Hume directly for comment and clarification about the auction did not

succeed.

However, in response to written queries on 13 February, Hume responded by e-mail to confirm that he planned to sell “the entire Southern White Rhino conservation project, including other wildlife (300) and domestic livestock, security infrastructure and assets”.

“Auctioning the project is to bring attention to the opportunity for a new owner to take over the success of the project saving the species from extinction and its potential to rewild ...”

“I am proudly 81! There are many views of what conservation means. I have bred a rhinos for 30 years. I know these rhinos, their habits, their social structures, and I am pleased with my contribution to conserving the species. My wish is to hand over this responsibility to a new custodian as dedicated and visionary as I have been.”

Further information about the auction would be disclosed closer to the event on the website <https://platinumrhino.co.za/auction/>

What about his significant stockpile of rhino horns harvested from live rhinos and natural deaths over the last 30 years? Is he also selling that?

“No,” he stated.

But there was one question he dodged, or overlooked. Was his decision to sell the business a final acknowledgement that the lifting of the CITES ban on rhino horn sales was unlikely to occur in his lifetime?

The answer to that question can, perhaps, be found in an article published in 2018 by the Save the Rhino charity group. “We have considered options available to Mr Hume



Rhino breeder John Hume. Photo: Tony Carnie

and, unless a new buyer for Buffalo Dreams Ranch and its rhinos in entirety can be found, believe it will be necessary to pursue a combination of strategies to safeguard the 1 626 Southern White Rhinos.”

“John Hume is clearly a passionate individual who cares for his rhinos. However, his business model has always been premised on a legalised trade in rhino horn, without – seemingly – a contingency plan for what might happen to these rhinos, if the trade ban continued. The lack of a back-up plan has, unfortunately, brought us to today’s situation.”

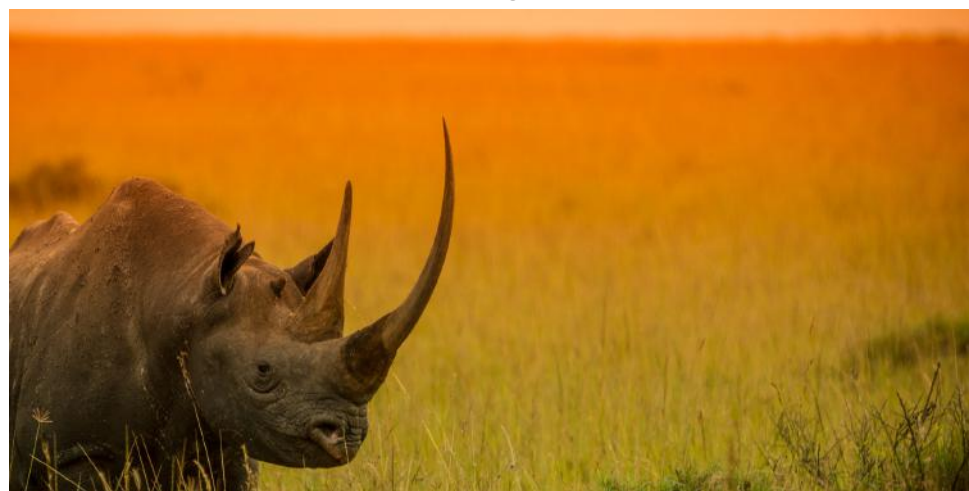
“While we cannot fund a rescue plan, we sincerely hope that the outcome, which may be a combination of options, is truly in the rhinos’ best interests, and for genuine rhino conservation reasons.”

This article was previously published in the Daily Maverick



Partially dehorned rhinos at John Hume’s ranch in North west. Rhino’s in the wild with their spectacular long horns

Photo: Tony Carnie Photo: CanvaPro



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Don't be fooled by Bibron's Stiletto Snake



1. Bibron's Stiletto Snake (*Atractaspis bibronii*)
2. Bibron's Stiletto Snake with a protruding fang
3. Bibron's Stiletto Snake, a non-descript snake often mistaken to be harmless
4. Bibron's Stiletto snake, well known for arching its neck as depicted in the image

Copyright Johan Marais



Johan Marais
African Snakebite Institute

One of the most common snakebites in the Lowveld is from the Stiletto snake, and largely because people mistake this snake for a harmless snake and pick it up.

It is a smallish non-descript snake, usually a dark brown to blackish colour, and it spends most of its life underground. But on warm summer nights, especially after rain, it emerges and can often be seen crossing roads.

Due to its plain appearance and blunt nose, it is often mistaken for a Mole Snake or one of the blind snakes. The Stiletto snake is unique amongst our snakes in that it has large fangs on the upper jaw that can be protruded out of the sides of the mouth, even when the mouth is closed. If you grab a Stiletto Snake behind the head (never a good idea with any snake) it merely twists its head sideways and a fang will get you. Otherwise, if gripped at mid-body, the Stiletto Snake will thrash about with fangs already exposed, and there is a likelihood that you will get bitten.

The reason for these unique fangs is that this snake lives and hunts in underground tunnels where there is limited space. Should it encounter a lizard or other snake in the burrow, a fang will be pushed out of the side of the mouth and the prey will be venomated in a stabbing action.

The venom of the Stiletto Snake is potentially cytotoxic, causing severe pain, local

swelling and eventually large blisters and necrosis. Most bites go a dark blue to purple colour within hours.

While the venom is not potent enough to cause human fatalities, the tissue damage is often severe, and many victims lose a digit or two after more than a week.

As there is no antivenom for the bite of this snake it is a matter of waiting to see what the outcome is going to be. Patients are treated for pain and should rest the affected limb. Both antibiotics and anti-inflammatories do not help and may cause additional problems. Early surgical intervention is also problematic and the golden rule is that doctors should not cut for the first six or seven days. After about one week it may be necessary to debride dead tissue or, in severe cases amputate a digit or two.

This snake is common where it occurs (largely absent from the Western and Eastern Cape) and is often found in swimming pools. Otherwise, small individuals may be brought into homes by domestic cats.

Whatever you do, never pick any snake up with your fingers, no matter how small it is.

Johan Marais is one of Africa's leading herpetologists and is CEO of the African Snakebite Institute. He is a best-selling author, a compulsive photographer, and a travel addict. Check out the website on www.africansnakebiteinstitute.com – get your free App on the link <http://bit.ly/snakebiteapp>



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Do giraffe lie down, do they eat thorns and how many bones do they have in their neck?

Do giraffe lie down?

Yes, they get up and down in the same manner as antelope. Did you listen to this thing on the popular young jet off, in fact, spend a lot of their first few days lying down through the night, and a lot of the day, while hiding and waiting the return of the mother to suckle them. When they sleep for a few minutes at a time, the neck is folded down and the head placed on the rump who. Otherwise the neck is usually up. It may be lowered when the animal is alarmed or wishes to avoid detection by predators. Adult giraffe spend at least a few hours every night lying down or resting, and often also during the heat of the day, although they usually stand and ruminate during this time. They do not voluntarily lie down flat as this could result in the stomach contents, which are forced to the mouth during rumination, being ingested into the lungs, resulting in suffocation (in common with all ruminants). Should this, however, happen such as when slipping and falling during daily activities or when males are knocked flat in extreme sparring

encounters, then they are able to get up from this position. In the normal lying position, they rest slightly to one side of the chest, as in other ruminants, to prevent the ingestion problem and to make rumination easier.

Do giraffe eat thorns?

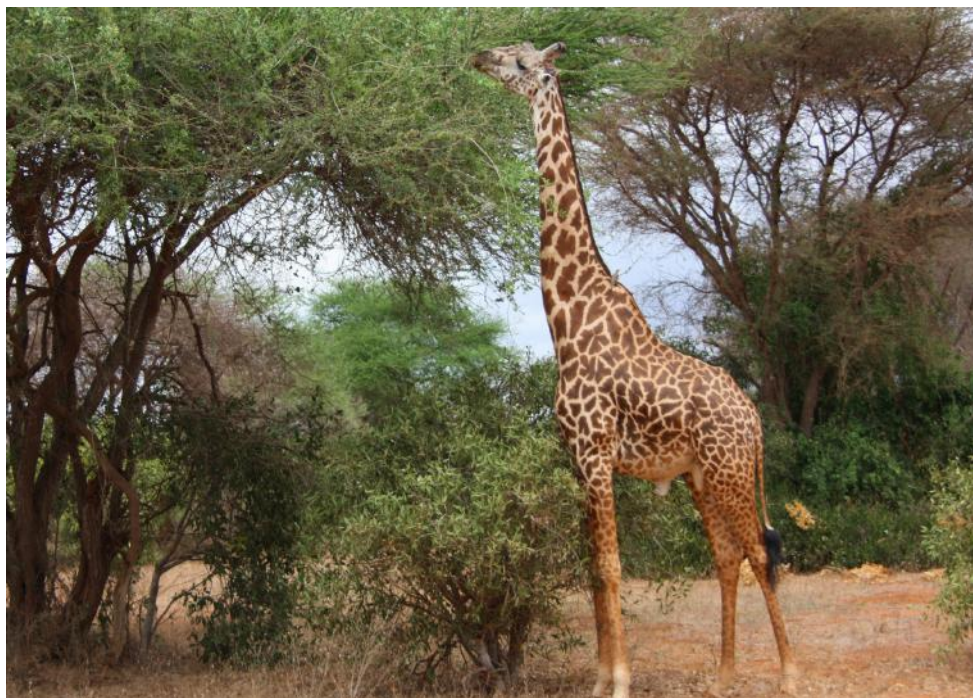
Generally not! Although some small thorns may be chewed up with the leaves, bigger thorns are avoided and, if taken in by the tongue, spat out. The misconception arises because they feed a lot on 'thorn' trees that have so many spikes that casual observers naturally think they ingest them. Giraffe have developed various techniques and adaptations to deal with this in order to exploit these plants that grow so prodigiously in Africa, thus monopolising the food source with little competition, apart from elephants. Firstly, they have a long (up to 45cm) prehensile tongue (able to curl and grip), rich, coupled with a very dextrous upper lip, manipulates the branches to allow the tongue to get in between the thorns and strip the leaves. A

thick, slimy saliva, a tough upper palate covered in ridges, and rough, horny projections (papillae) on the inner lips and tongue help cope with pricking that occurs during feeding. The rubbery outer lips enable them to cope with stripping and breaking off curved thorns of many Acacias in an effort to get at the leaves.

How many bones in the neck of a giraffe?

Seven, as is the case with most mammals. They are, however, a lot longer than the rest of the vertebrae, resulting in the illusion that they are more. The point where the last vertebra articulates with the skull, called the atlas/axis joint, is modified to allow the head to move straight up to the vertical. This is uncommon in other mammals, and is an adaptation allowing giraffe to utilise even more of the uppermost strata of trees, which are out of reach to all terrestrial animals except elephant.

Excerpts from 'Beat about the Bush – Mammals and Birds' by Trevor Carnaby, Published by Jacana Media, Second Edition reprint 2018



Mila Mai Job making a difference on her own!

Local correspondent

Mila Mai Job has a passion to help make a difference, and educate others.

She lives in the Makalali Private Game Reserve. She was born and bred in the bush. She has become accustomed to, and been in contact with wildlife and conservation from the get-go. She has the same love for wildlife and our environment as her Dad.

Mila is now 6 years old, and because of school, stays in town during the week. Driving the short distance to school and back each day, Mila, at the tender age of 6, expressed shock at the amount of litter and rubbish on our surrounding streets and in fact our town.

On her own initiative and with her lively passion, she asked if she could walk with her Mother, from their apartment to pick up the litter on the roads. Of course, her Mother encouraged this. It is amazing that a child of 6 already understands the impact of the rubbish and garbage on our local environment, and across the globe.

This has now become a regular ritual after-school activity. One day whilst collecting rubbish with her Father and Mother, she asked why no one else was collecting rub-

bish, and suggested that maybe her parents should ask her friends to join them. The purpose and inspiration that Mila shows could help inspire others of all ages, to firstly refrain from dropping litter, and to take a little time to better our environment for the benefit of all.

Mila has suggested that once a week, at the same time every week, we all walk from

our homes and collect the litter we see. She wonders how many bags we could all fill here in Hoedspruit.

It is amazing how much is thrown onto our streets on a daily basis – as shown in the pictures – and we all appreciate Mila's efforts.

Well done to Mila and keep up the good job!



Please do not litter. Let us keep our nature and communities clean.

The final few tips on honing your skills in the identification of birds



Laughing and Red-eyed Dove - notice the difference in size and colouration
Image : Ed Raubenheimer

Mike Meidlinger

For many of those who enjoy birding, but who struggle to break from their current introductory level to one more akin to intermediate, the transition may at times seem daunting to say the least. Improvement of field skills and mind-set are a large aspect of building ability and confidence.

Simple actions like practicing putting binoculars from chest to eyes as rapidly as possible or trying to stay focused while following a fluttering butterfly in the bins, offer physical improvement. They are rudimentary yet helpful ways to practice for birds in the field.

These second to half-second long exercises build muscle memory. This means that getting the best possible detail, in a quick flight view of a darting bird for example, suddenly falls within the realms of possibility as actions are swift and automated. The best practice of all is actively to get out birding and try it all on real birds.

In the field there are two major challenges, the first is the fact that views can be brief, especially for birds moving in flight, or while gleaning obliviously through canopies or belts of vegetation. The second is having birds at long range or at considerable distance. In these cases, while out in the field, hit the nail straight on the head.

Look out for distant dots in flight, get the binoculars up and focus. See if you can make out what there is to be made out. It is surprising what will be possible to even the un-trained eye. Aspects like bill shape, tail length, contrast between back and wings, head colour and more, all stand out from considerable distance.

These and almost all aspects of bird identification, have to do with the underlying principle of general relativity. Not Einstein's gravitational epiphany that sparked the knowledge of today. No, rather in a birding context, it can be thought of as a two-step process of generally assessing how birds compare to one another, in relative terms.

If it is a dot in the distance, then how does it compare to what other dots should look like from this far?

For example, if the bird at distance looks to be about the size of an eagle, if it is spiraling widely in the air and has a bright white head and tail, it is an African Fish Eagle. No other eagle from that distance will have that combination of white extremities and dark body.

Another example might be of a Tawny-flanked Prinia darting into cover, across a narrow but well vegetated path 50 metres ahead. It looks like, well, all other LBJ's, but has a long tail for its body which is rather small but plump at this distance. When it flew, it didn't fly very strongly, in fact the tail seemed to dip a bit in between wing beats. This immediately gives a few details from which to mentally compare against small brown birds, without unusually long tails and with steady flight patterns.

General relativity doesn't only apply to birds at distance but can apply in any birding context. The most basic way that birds can differ is in size. This word doesn't just denote the objective size of a bird but also applies in much more subtle ways. Even classically small birds, like warblers or finches can appear large or small when compared to one another.

A good example is to think of the three most common garden-visiting doves in the country, namely Red-eyed, Ring-necked (old name Cape Turtle), and Laughing Dove. Red-eyed is comparatively the largest, while almost half in bulk and size is the Ring-necked, and finally the delicately built Laughing Dove. They are all doves no doubt, so they are all medium-size birds, but they differ in size when compared to one another.

Relativity between two similar species often comes down to comparatives in colour. In keeping with the current example of the doves, Laughing is undoubtedly the smallest but is also the most brightly coloured of the three. The body of this species is a mix of pleasing terracotta pink over much of its upper and underparts, with a sky-blue wing panel. Comparatively the Ring-necked is pallid grey all over. Finally, the Red-eyed on the other hand, has deep purple tones to the breast and belly, which stand out as darker when compared to the bland and slate-toned underparts of the Ring-necked Dove.

The relativity of colour can be extremely subtle, yet it is often an incredibly consistent character in many species. Colour is best used when directly comparing two birds against each other in the field, but this is not always possible or even required. Through birding and exposure, the judgement of colour of individuals of different species becomes more and more ingrained through experience. Simply being aware of variations such as rufous-brown, chocolate-brown, olive-brown or grey-brown, all be-

gins hard-wiring the brain for picking these various tones up in the field.

When it comes to plumage and colouration of similar species, a large part of, or the entire body, may appear to be different. However, in many cases it may be a single region or feather group that differs with enough reliable consistency, to separate one bird from another. Knowledge of the different parts of a bird, those found on the diagrams in the first pages of the field guides book, is useful for being able to translate species descriptions. These descriptions outline what to look for when trying to identify the species they describe.

An example of this, are the bold cream to white coloured wing bars seen on resting Square-tailed Nightjars. The bird is a nightjar no doubt, with the typical cryptic mottled mayhem it calls a plumage, but this one feature stands out. The presence of one or usually two prominent pale lines, indicates an easy way to separate this smaller-sized and more compact species from the other local nightjars. These other local species are represented by Fiery-necked, the rock-dwelling Freckled and the silent but migratory European Nightjar. Thus, knowledge of a comparatively unique feature, such as these wing bars, mean that Square-tailed generally looks like all other nightjars, but relatively, it has at least one consistent feature to readily separate it from the others.

Even the way birds fly can help separate one species from another. African Grey Hornbills for example have a slower more laboured "flap, flap, glide ... flap, glide. ... flap, flap, glide" pattern. The similarly dimensioned Southern Red-billed Hornbill and the Southern Yellow-billed Hornbill, on the other hand, tend to flap rapidly, while climbing in height for several seconds before gliding down over tens of metres, then again, furious flapping, followed by a long glide.

In almost all cases in Southern Africa this is the extent at which most birds are identified, whether side by side, alone, in flight or offering brief glimpses. For most local birds, the number of aspects to be aware of, in terms of general relativity, are surprisingly few. Each species perhaps requires two or three features at most, to be mindful of. So once down to comparing between similar species, once at the family level or so, there are only a handful of things to look for to ascertain identity. Picture a small darkish bird, suddenly darting rapidly away and into the canopy of a tree ahead. The view is fleeting and all that could really be seen was its passerine nature, and small size. It generally could be a Warbler, or a Flycatcher, or by some weird impression, almost like a fast-flying Sparrow. As it is about to land, it opens its tail which reveals two bright white sides along the whole tail length, this makes it most likely, a Honeyguide. Getting closer, an obscured perched view shows it has a grey head, greenish back and looks comparatively like a Sparrow, these all add to confirm it as a Lesser Honeyguide.

Homework and self-study, in other words time spent pouring over books, apps or articles, are the key to the knowledge of each species secrets. That, or get out birding with those who are out often; will all ow you into the part that they have figured out, and the many shortcuts or other tell-tale features to look for. While out, it is useful to be keeping in mind the idea of generally getting to what a bird might be, and then relatively, how does it compare to others that are similar.

Even in terms of vocalisations, one song or call may be comparatively slower, faster, higher pitched, more melodic, more rasping, and so on, than others. As an illustration, a "tchuk" contact call from a Marsh

Warbler is very similar to, but noticeably softer, more mellow, and more isolated, than the "tchuk" contact call of a Red-backed Shrike. The shrike emits a note which is harder, more punctuated, more mechanical, and often strung together. Yet another instance of a slight but noticeable difference to the attentive ear.

For the most challenging birds, which are represented by only a fraction of species here, there are several features to look out for simultaneously, to be able to seal the deal. Importantly, none of these stands on its own as a categorical way to separate, but rather it is the combination of several features, that create 'the whole image' of each species.

For example, in identifying Greater and Lesser Sand Plover, no one feature is the smoking gun. In this curious case, identification is secured by combining aspects seen in the field, under a variety of conditions like light, distance, and wind. Plumage and structural features like stature, bill length, bill tip sharpness, leg colour, wing bar and tail pattern, are all assessed to ascertain the overall impression each bird gives.

In the variety and continuum that nature represents, on some distant palm-strewn sandy shore, there can be birds that don't fit easily. Can there be a small-billed Greater or one with blackish legs and can there be a large-billed Lesser or one with greenish legs – yes - but on average it is rare to have many of these features overlap in a single individual.

Thus, in the most challenging of groups, it is important to get a grip of all the features and not become reliant or being distracted by only looking for a single clincher.

It is imperative to stress, despite this layer of birding, existing for 95% of species encountered in this part of the world, simple, basic, and informed general relativity is all that is needed to reach a conclusion. This results in a small number of specific features to look for, when attempting to figure out any raptor, wader, warbler, cisticola, lark or distant dot.

This month, whether out in the field, relaxing in the garden, or actively in pursuit of a special target, use the idea of general relativity to your advantage. This concept not only helps those who are starting off in the hobby, but also veterans aiming at sharpening and honing their skills, and who are on the path to mastering all aspects that come with the turf in bird identification.

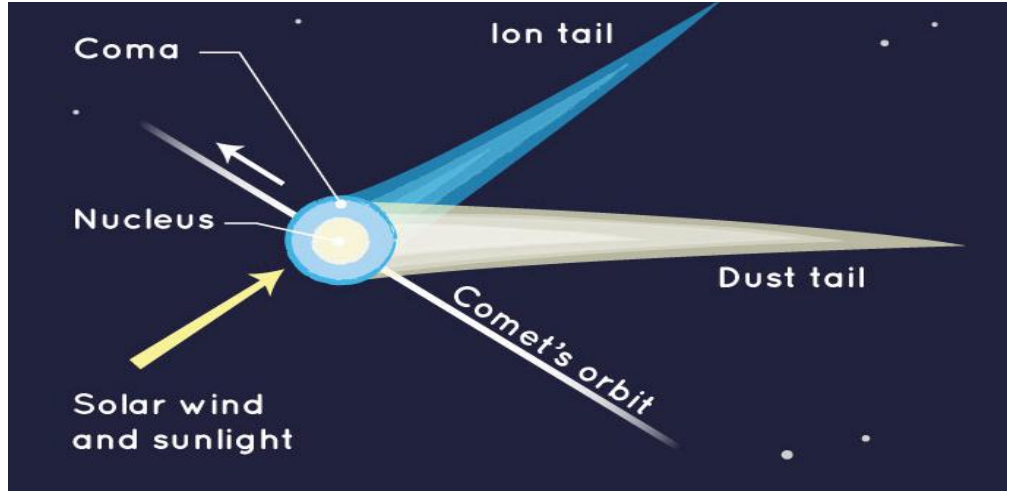


Fiery-necked Nightjar - see lack of pale wing bars
Image: Tony Dodds



Square-tailed Nightjar - note the bright white wing bar running from the shoulder
Image: Tony Dodds

Green with comet envy



Ben Coley

Last month saw the return of a celestial visitor that was last viewed by our distant ancestors around 50 000 years ago!

The green comet, otherwise known as Comet C/2022 E3, made headlines through January and early February as it returned to Earth after its massive hiatus from the far reaches of our solar system.

It was first detected in March 2022 by eagle-eyed astronomers as they were scanning the heavens. Most comets are only discovered at the last minute, since they are so small in comparison to other stellar bodies and need to be relatively close to us to be seen. A year ago, the green comet was a whopping 650 million kilometres from Earth (about the same distance as Jupiter), and gave off 25 000 times less light than the dimmest stars visible to the naked eye.

Since then, it has travelled much closer to us on its elongated, parabolic orbit around the Sun, and reached its closest approach to Earth on the 1st of February, whilst in the northern hemisphere constellation of Camelopardalis. Close is a relative term however, since the comet was still 42 million km from Earth! This is not much closer than Venus gets during its closest approach to us.

Unfortunately this put it out of range from our location in South Africa, and we had to wait another week or so before it moved into Auriga, the Charioteer, and on to the zodiacal constellation of Taurus, passing quite close to Mars in the sky.

The comet was fading from view as it entered its return trajectory, speeding away from the Sun at thousands of kms per second. There is a good chance that it's orbit will take it outside the influence of the Sun's gravity and it may never return, so I hope that you had a chance to view this one in a (multiple) lifetime stellar beauty.

Although below naked eye visibility, the comet was visible as a faint fuzzy star in binoculars, and long exposure photography could easily pick up the green glow. Those with designated star tracker mounts and

astrophotographic equipment were able to get some incredible photos of this verdant celestial visitor. Unfortunately, I was away and did not manage to capture its viridescent wonder, but many amateur photographers around the world were able to do so.

Comets are remnant of the solar nebula, the disc of excess material that was spun off by the Sun in its early years, that went on to form all the planets and other objects in the solar system. Most comet nuclei reside in either the Kuiper Belt, or the Oort Cloud, rings of stellar outcasts way beyond the orbit of Neptune. Asteroids are lumps of rock, whereas comets are chunks of frozen dust and gases like carbon dioxide, carbon monoxide, methane and ammonia, as well as water ice.

As they approach the Sun, they begin to warm up and melt, forming a gassy envelope around the nucleus. This 'coma' is what gives a comet its hazy appearance, the gases glowing with a ghostly green hue as they react to the solar winds. The dust, now freed from their icy prison forms a tail behind the comet as it rockets through the solar system. These dust trails remain suspended in space and every year, the Earth periodically passes through the debris fields, the particles colliding with our atmosphere causing meteor showers. A secondary tail known as the 'ion tail' is also visible, caused by the solar radiation stripping off electrons of particles within the coma.

Halley's comet is responsible for 2 showers each year, the Eta Orionids and Eta Aquarids, but traditionally, the best shower of the year is the Perseids, which peaks in the second week of August, with up to 120 meteors an hour. This is quite a spectacle and is a chance for some dramatic long exposure photography. Unfortunately, this currently coincides with a bright moon phase, and many of the shooting stars are hidden from view, but as the years roll by, this will change and we will enjoy the full force of this remarkable show once more. Meteor showers are named after the area of space (and thus the prominent constellation) that the majority of meteors seem to emanate

from, and is known as the 'radiant'.

I hope some of you managed to enjoy this spectacle and do not despair, there will be more! Many comets are only discovered months before they are first seen, so it may not be long until we get to witness another flyby from a celestial outcast!

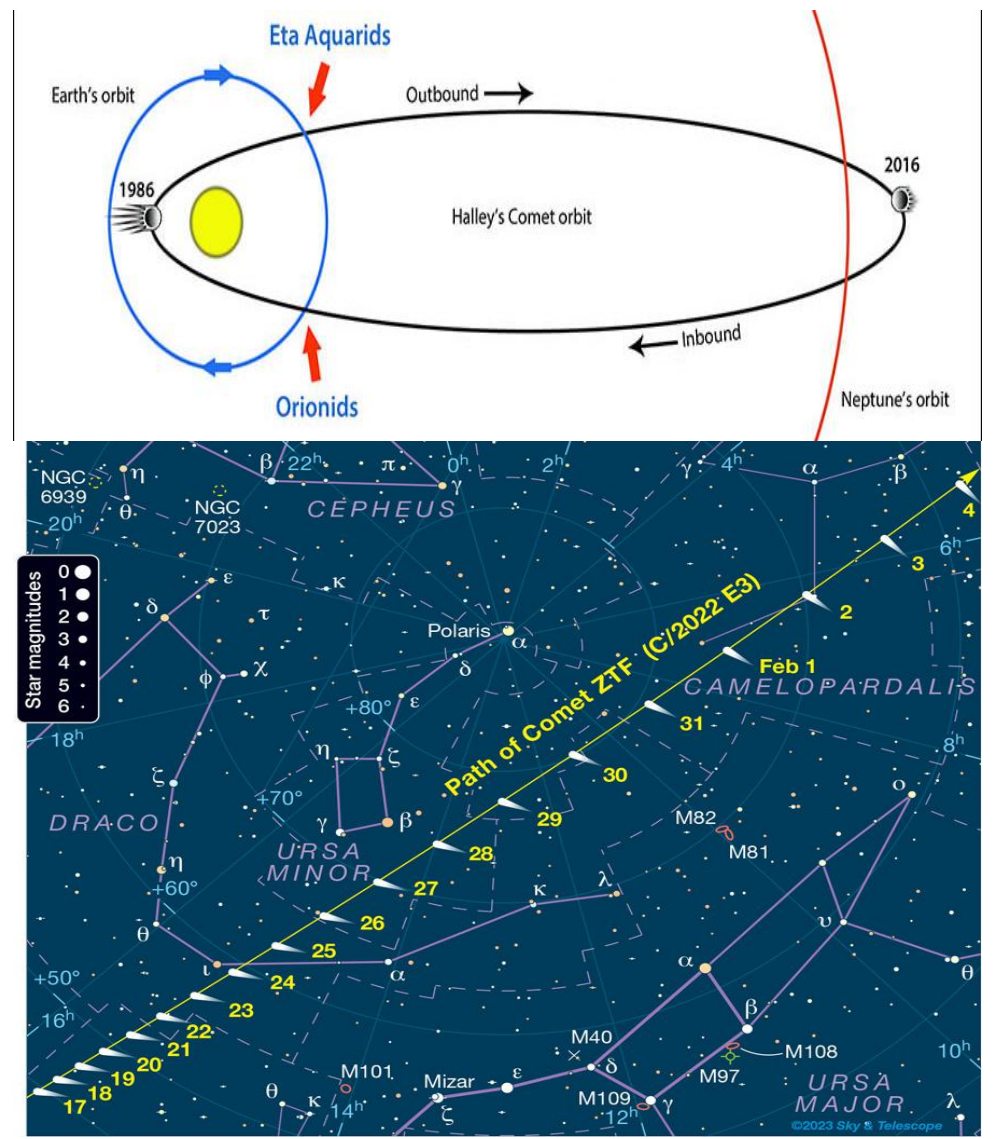
See *Celestial Events SA* advert for contact details

Comet 2022 E3 (above left)
Image: Miguel Claro) Universe Today

Comet Anatomy (above right)
Image: NASA

Meteor Showers (below)
Image: Bob King Universe Today

Trajectory Path (bottom)
Image: Sky and Telescope



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Small butterfly jewels of the bush and garden

Ian Sharp

The largest Family of butterflies is the species-rich and biologically diverse Lycaenid group. This group contains most of the smaller butterflies, including what may be considered the smallest of our butterfly species in the Lowveld. The Dwarf Blue (*Oraidium barberae*) is a dainty butterfly not easily spotted, and with a wingspan of only 10 to 18 mm.

Layman reference to this group include names such as coppers, bronzes, blues and skollys, with more than twelve other 'clusters' forming the Lycaenid group. About 47% of the butterfly species of southern Africa are from this group. They occupy almost all habitat types and have interesting life history variations and adaptations, from predatory behaviour to life-giving associations with other organisms. Adults of many from this group display splendid colour variations and some are brilliantly striking whilst others have entire camouflage patterning. According to the publication Butterflies of the Kruger National Park, more than 38% of

butterfly species occurring in the KNP are Lycaenids.

The 'blue' and 'copper' representatives of this group are more likely to be found flitting in a garden or adjacent patches of natural vegetation. These groups are so diverse, that it would take many Kruger2Canyon News editions just to discuss some of the most interesting biological traits.

The reliance on certain of larval host plants has been mentioned in previous articles. The herbaceous flowering plants are of great importance, and most pertinent are those we commonly refer to as 'weeds' when it comes to our well-manicured gardens. It is not only the herbs that are essential to the Lycaenid lifecycles, because many species also utilize a variety of trees and shrubs as larval host plants. In some instances, lichens or mosses are adopted as larval host plants by certain species.

A particular shrub well-known throughout the Lowveld, the Large Sourplum (*Ximenia caffra*), is a larval host to some of the most spectacular Lycaenids – the Sapphires. The Common Dotted Border (*Mylothris agathina*) from the Pierid butterfly family

(whites), also use the Sourplum as a larval host species. The hemi-parasitic plants like the mistletoe *Viscum*, *Erianthemum* and *Agelanthus*, are important larval hosts for Sapphires. The Saffron Sapphire (*Iolaus pallene*) and the Bowker's Marbled Sapphire (*Stugeta bowkeri*) are striking examples having the Sourplum as one of their larval host plants. See picture 1.

An interesting life history aspect of several Lycaenid species is the association with certain ant species. This is referred to as 'myrmecophily' which may be defined as 'an organism that is dependent on ants for, at least part of its lifecycle'. This relationship is considered a symbiotic relationship with ants, such as being tended and protected by ants or living inside an ants' nest. The butterfly larvae produce nectar - a type of 'honey dew' - through specialized organs, and they can communicate with ants through sound and vibrations.

The copper female butterfly would lay her eggs near the base of the larval host plant (or on the base of the plant) where there is the required ant colony. With the ant-blues, the females lay their eggs on the larval host

plant leaves or flower buds. A well-publicized example is the threatened Brenton Blue (*Orachrysops niobe*) that only occurs in a small patch of suitable habitat on the western shore of the Knysna lagoon.

Some local ant-associated butterfly species are the Dusky and Damara Coppers (*Alcides taikosama* and *A. damarensis*), and the Twinspace, Patrician, and Silvery Blues (*Lepidochrysops plebeia*, *L. patricia* and *L. glauca*).

The coppers utilize *Waltheria indica* (Sleepy Morning) as their larval host plant. Associations are made with *Lepisiota* and *Pheidole* species of ants, and they will rest in the ant nests by day and feed at night. The ants may feed the larvae in the nests, but the larvae may also prey on sub-adult ants. See picture 2.

The ant-blues have a common larval host plant in the indigenous *Lantana rugosa* (Birds Brandy), commonly found in the Hoedspruit area. This herb should not be confused with the alien invader *Latana camara*! The ants associated with these butterfly species are from the *Camponotus* genus. The female butterfly lays her eggs on blossom buds if the ants are in the area. It is only when the larvae reach the third instar (effectively the third skin shedding process), that an ant brood pheromone is produced and, on finding the larvae, an ant will carry it to the nest. The larvae then feed on the ant brood, pupating within the nest. When the adult emerges, it will be chased by the ants and must flee from the nest. See picture 3.

These examples from the Lycaenid group have only scratched the surface of the proverbial 'iceberg'. I hope to present more of the amazing representatives of the Lycaenids in the future. All images supplied.



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The mopane tree - *Colophospermum mopane*, often despised but has a lot to offer



A beautiful grove of Mopane trees (above left) Image: Wikipedia

Mopane leaf (above and below) and Mopane worms (left)



James Steyn

Senalala Safari Lodge

The infamous mopani tree, is a very popular tree in parts of South Africa – not from a tourist perspective, but from occurrence. South Africans are also very anti the tree because they believe that in parts of the Kruger National Park where the mopani dominates, there is no game viewing – this could not be further from the truth.

It's a fascinating tree, the Latin name is *Colophospermum mopane*. *Colophos* comes from colophony, which is a chemical substance, often called rosin. The name colophony comes from the Latin and is named after the city of Colophon (an ancient city in Ionia, in current day Turkey), which was known for producing hardened resin. Rosin is the residue left over in the making of resin. This part of the name may also be aligned with the strong turpentine smell of the resin, which back in the day was produced, strangely enough, in the city of Colophon. *Spermum* is the Latin for seed – and so the genus broadly refers to an oily seed. The species name *mopane* is the Shona for butterfly or moth, because of the shape of the leaf.

There is only one mopane tree in the world, in its genus and specie. It is related to the rooibos tea bush as we know it, and to the pea family – which is very interesting. It is also one of the heaviest woods in South Africa weighing more than a ton per cubic metre, and the tree can grow up to 25m in height!

Hole nesting birds like the hornbill, love mopane woodlands. There is also 'Mopane manna' which is picked off the leaves by people and baboons. It is a sweet-tasting, waxy cover on the juvenile stage of a sap-sucking insect known as the mopane psyllid, *Arytaina mopani*. There is also the tiny mopane bee, *Plebina denoita*, which many know from its (sometimes successful) attempts at crawling into one's eyes, ears, and nose in search of moisture. This little bee produces a small amount of edible honey often in the hollow trunks of the tree.

The most significant thing about the tree is that it has a caterpillar, associated with the tree in certain times of the year - in summer. This is called the mopane worm – I think that's why most people know the tree and why it is 'famous'.

It is not a very nutrient rich tree, although elephant bulls do feed on it extensively and extract a lot of protein out of it. The cows don't feed on it too much, especially if they are lactating, because they cannot get enough nutrients out of the tree. But essentially it is used for its high protein source or value. Even the dead leaves on the ground still offer some protein, 40% of the original content, which is amazing. At stages they were even used collectively to feed cattle in certain parts, back in the day.

The tree has incredibly good adaptations to dry, hot climates in that at the base of each bi-foliate leaf (two halves to the leaf), there are small vestiges or organ-like structures that are called a pulvinus or pulvini. So, in the process of photosynthesis when the tree is using solar energy to create a

food source (carbohydrates) these pulvini, fill up with liquid and they swell, causing growth independent motor movements in the leaflet and the leaflets effectively close. During hot times of the day, the leaflets close towards each other, and the leaflet therefore has less surface area exposed to the sun, preventing water loss.

The moth associated with the tree is called the mopane moth, *Gonimbrasia belina* (part of the emperor moth family) – a cream coloured moth, with beautiful eye spots on the underwings that are used for defence. If startled by a predator it will suddenly open its wings revealing the eyespots, which very often startle the would-be predator. It supposedly resembles the eyes of an owl.

If further harassed, the moth has another mechanism for defence – it will just tuck its wings in, and fall to the ground like a leaf, and land amongst the dead leaves on the ground, where it blends in well. The cryptic colouration ensures that it is very camouflaged.

After the first spring rains, the moths crawl out of the ground, and they then lay their eggs on the mopane tree – they are almost exclusively specific to the mopane tree. Eggs are laid, they hatch, and the worms climb out, and they start vigorously feeding on the mopane trees.

The worms grow very quickly. In some years there are so many of them that they eat almost all the leaves on the mopane trees, and it looks like the mopanes are either dead, or lost their leaves again. Essentially though, they are just restimulating the growth in the tree which is key. There

could then be spill-over onto other trees for the caterpillars to feed - examples are the marula tree and apple leaf, when there are not sufficient, or no mopane leaves to be eaten.

Once fed, and if they have grown to adulthood, the worms will crawl underground again where they will lay for about 6 months of the year, pupate, and then crawl out as a moth again, in the next spring. The cycle is therefore an egg, larvae, adult and then a pupa – this is the complete life cycle.

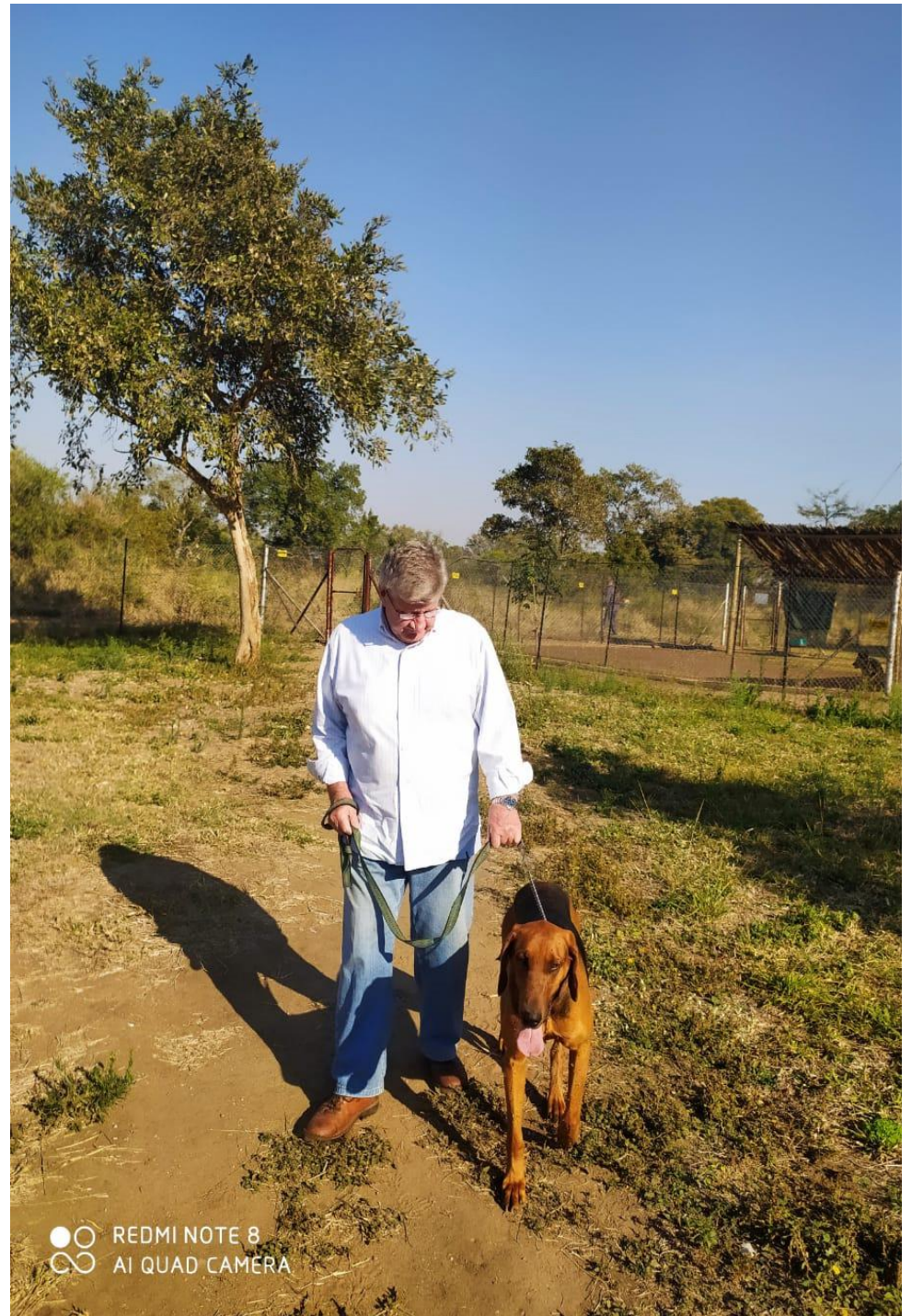
The worms are seen in many African countries as a very important source of protein. Once they are harvested, there are different means to eat them; they can be dried out and eaten as a 'dry crisp', and they can also be cooked into a broth, like a stew. They do have some economic value as some people sell them, and so there can be a 'trade' in worms. The worms are a protein source, as well as stimulating some sort of economic operations.

The worms live for about two months. The moths however have a very short life span, crawling out of the ground, mating and then laying eggs and dying off.

Something else that is quite significant in the Klaserie, about 6 years ago, during a drought, rhino and buffalo were seen browsing on the mopane leaves – eating not only the leaves on the tree but the fallen leaves as well.

This is a very interesting tree that has a whole story associated with it – it's not to be ignored.

It's not a dogs life



Lovelle Henderson

In many instances, dogs are an integral part of people's everyday lives. While domestic animals will always provide much companionship and pleasure, the role of working dogs in protecting South Africa's wildlife and conservation endeavours is particularly important. Poaching in South Africa's national parks remains a major conservation challenge and, in general, all encounters with poachers that involve dogs result in arrests.

A critical contributor to the success of anti-poaching initiatives, is the work of the SANParks K9 Unit. The unit has anti-poaching as its primary objective. These magnificent animals are especially bred for the important work that they perform in the reserve. Malinois – Belgian Shepherd dogs – are hugely active animals wanting to please their handlers. They are detection dogs. Bloodhound/Doberman crosses are tracker dogs, and can follow scent trails for hours on end, diligently pursuing their target. Well-trained tracker dogs are perfectly suited to track poachers in the field, and can also detect firearms, ammunition, and wildlife products that are smuggled in and out of park gates. These remarkable dogs follow scents, which may be hours old, over vast distances. Tracker dogs are deployed by helicopter or vehicle and operate throughout the park.

The SANParks K9 Centre in the Kruger National Park, is supported in a practical way by members of SANParks Honorary Rangers (SHRs) through the K9 Project Watchdog. A volunteer organisation, SHR give freely of their time and skills to sup-

port SANParks in fostering conservation in South Africa's national parks. Four members of the Rotary Club of Hoedspruit also double up as Honorary Rangers, and one of the favourite duties, is looking after the dogs at the K9 Centre.

The volunteers approved to work with the dogs, are organised and deployed by the coordinating SHR for dog handling support, Monica Stark. Monica provides guidance on the specific requirement of each individual animal.

Hazel and Alan Partington and the Lovelle and Michael Henderson do regular service at the unit over weekends and public holidays. "We get very attached to the dogs," says Lovelle, "and my favourite is a bloodhound who works the area in which the centre is situated. She goes out early every morning on her tracking duties with her handler who she obviously adores." Lovelle adds that when she (the bloodhound) returns late morning, she is very tired but loves a cuddle and a brush after she has had a good sleep in her shady run, supplied and installed by a team of Honorary Rangers. Hazel enjoys keeping an eye on dogs who may be at the Unit for medical reasons or because their handler is on leave, giving that extra bit of TLC.

Michael and Alan's favourites are a Bloodhound/Doberman crosses. These dogs are extremely strong and it is necessary to be non-confrontational, when taking the dogs for a walk on their leads. During cuddle and brushing times, the dogs often roll on their backs waiting for the brush strokes and enjoying the attention. All dogs are fed special, individualised, diets each evening. It is essential to be meticulous in following

Sponsor board (above left) and one of the dogs being taken for a walk (above right) Images supplied

their respective diets, and when dispensing food and medication.

The work at the K9 Unit is not glamorous! Early morning is the time to thoroughly scrub and sterilise all the kennels and beds, as well as clear each run and check for overnight intruders. These highly trained, very expensive animals are precious, and there are strict guidelines for looking after them carefully, to ensure that they are nurtured and kept healthy, safe and happy.

Recently Rotary volunteers had the opportunity to support the K9 Unit in a different way. The Rotary Club of Hoedspruit runs an annual K2C Cycle Tour. This amazing event in which 100 cyclists cycle 100km through Big 5 territory, raises funds that are donated to support conservation. During 2022 the Rotary Club of Hoedspruit, thanks to the generosity of its cyclists, was able to donate R30 000 to the SHR K9 Project Watchdog. This donation assisted in covering essential support for the dogs, such as veterinary bills, as well as contrib-

uting to the satellite data bill for their GPS harnesses.

Rotary Club of Hoedspruit is now proud to be featured on the K9 Unit's donation wall.

SUDOKU

ANSWERS

3	4	9	2	5	6	1	7	8
6	7	5	3	8	1	2	4	9
1	2	8	4	9	7	3	6	5
9	6	1	7	3	8	5	2	4
5	8	4	1	6	2	9	3	7
7	3	2	5	4	9	6	8	1
4	1	3	8	2	5	7	9	6
2	5	6	9	7	4	8	1	3
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Today's thinking child is tomorrow's achiever

Acornhoek art teacher invited to global art conference

Local Correspondent

“Picasso is my inspiration – he declared that every child is an artist. I believe all students possess potential.”

Walter Sibuyi is an art teacher and sculptor bringing a splash of colour and hope, whilst shaping and moulding the future for young people in Acornhoek. His inspirational art classes at Shobiyana High School are hugely popular, increasing school enrolment rates and improving student attendance. Under his guidance and care, his lessons have gone a long way to reducing the dropout rate at his school, encouraging learners to return week after week, to hone their creative skills. “Young people need something that will inspire them and give them hope” explains Walter.

Born in a village near Acornhoek, Walter (48) has been teaching art at Shobiyana since 2012. He is a graduate of the FUBA School of Dramatic and Visual Arts. “When I first started drawing, I only had charcoal and scrap paper. It was a long time before I could afford paint. Now I want to encourage young people to express themselves and tell their stories through art”.

Realising the potential of art as a powerful vehicle for change, Sibuyi helped found the Winds of Change community project. This is an after-school club, where students can combine homework with art. “I want to provide a safe space for children, so they are not led into temptation on the

streets” said Sibuyi. A number of his former students have proved to be talented artists and have gone on to earn a living through painting and selling their artwork.

Walter is however perhaps best known for his spectacular sculptures – including huge wire figures filled with rocks. These can be seen at Shobiyana High School and at various sites in and around Acornhoek. “Elephants are my favourite animals, because like humans they have a memory, and have so many stories to tell”.

“I believe we can change the world through art - without art there is no life.”

Walter’s reputation has spread far and wide, and he now has a unique opportunity to collaborate with art teachers from around the world. His dream is to attend an art conference in Budapest. Walter explains, “Visitors heard about my work and came to Acornhoek to see my sculptures, posting their pictures on social media. Though this, the Global Art Teachers Exchange programme (GATE) saw my work, and I have been invited to their international conference in Budapest in September! I’ve had to submit a proposal and lesson plans, which have been accepted. It is my dream to be able to go to Budapest and work with art teachers from Europe and America. I want to share my expertise and learn from them and bring new techniques back to Acornhoek”.

To attend, Walter needs to raise R45 000 to cover travel costs and accommodation. This is sadly beyond Walter’s means, and so



All image credits: Warren Ngobeni, Wild Shots Outreach

the appeal is for some sponsor to come on board and help Walter achieve his dream.

If there is a sponsor out there willing to help Walter, he can be contacted on his cell at 072 767 1224 or alternatively email him on waltersibuyi@gmail.com.

What an inspiration Walter is, and here’s hoping he gets to achieve his dream.



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 * XI *

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WEATHER & CLIMATE

Did you know that there is a difference between weather and climate? Look outside, what do you see? If it is raining or hot and sunny you are looking at the weather of the day! So, what is climate then?



What do these instruments measure?

1. thermometer
2. rain gauge
3. barometer
4. wind vane
5. anemometer

CLIMATE

Climate describes the typical weather conditions in an entire region for a long period of time – 30 years or more.

WEATHER

Weather refers to short term variations like a 24-hour period of how hot, cold, wet, dry, calm, stormy, windy, clear or cloudy the conditions are over a period of a few hours to a number of days.



Weather Word Search

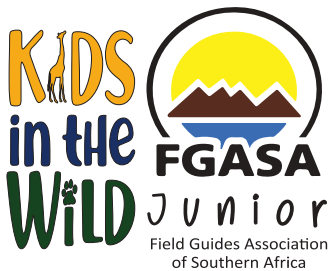
Can you find the words hidden in the puzzle?

P	K	S	U	M	M	Y	L	C	E	M	P
L	H	A	N	R	O	A	H	O	T	U	A
D	O	F	C	O	O	L	K	L	R	S	R
O	T	I	L	C	W	I	N	D	Y	I	T
E	E	T	C	C	N	Y	E	B	O	O	L
F	R	F	H	L	G	S	O	H	V	H	Y
O	S	S	O	R	O	R	C	A	F	E	C
G	T	T	S	L	S	U	N	N	Y	I	L
G	O	W	L	O	T	A	D	D	R	L	O
Y	D	R	A	I	N	Y	D	Y	G	I	U
K	M	H	N	R	P	E	N	N	N	S	D
P	S	T	O	R	M	Y	A	R	E	G	Y

- Answers: weather instruments
1. thermometer - temperature
 2. rain gauge - amount of rain that has fallen
 3. barometer - atmospheric pressure
 4. wind vane - wind direction
 5. anemometer - wind speed



- | | | | |
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