Singita

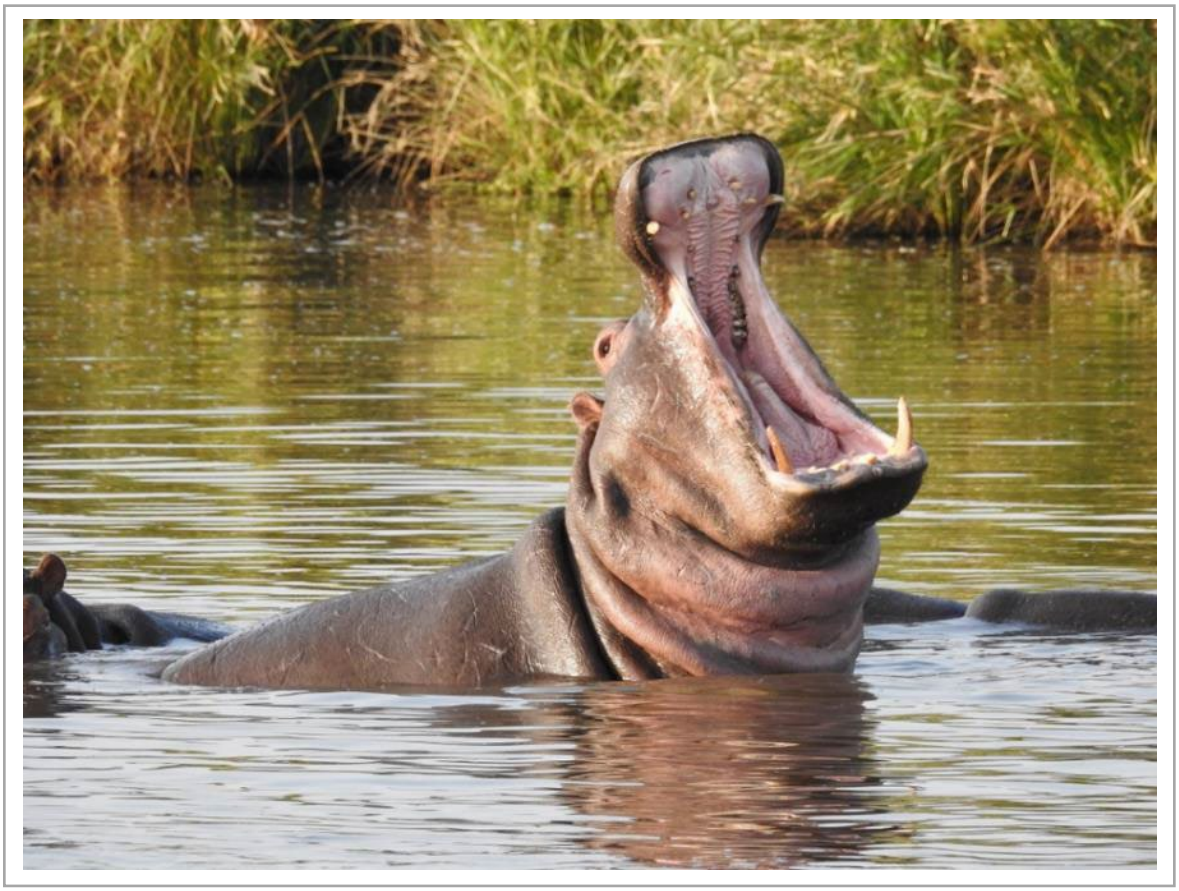


Photo by Brian Rode

WILDLIFE JOURNAL
SINGITA KRUGER NATIONAL PARK, SOUTH AFRICA
For the month of July, Two Thousand and Twenty-three

Temperature
Average minimum: 12.0˚C (53.6˚F)
Minimum recorded: 10.0˚C (50.0˚F)
Average maximum: 25.3˚C (77.5˚F)
Maximum recorded: 31.0˚C (87.8˚F)

Rainfall Recorded
For the month: 10mm
Season to date: 423.5 mm

Sunrise & Sunset
Sunrise: 06:29
Sunset: 05:27

The days are getting longer again. We had a few very chilly mornings and evenings as a large cold front pushed in from the south and everyone had to put their fleeces and jackets back on. Across the country, snow fell, but fortunately, this area does not get that cold. Other than this front that arrived, we have had a fairly mild winter so far. Some of the trees have already come into bloom as if they are expecting spring to arrive early. Others are still in the process of losing their leaves. The knobthorn trees are now showing their fluffy white flowers

and the long-tailed cassias have already finished showing off their golden petals and are starting to get new leaves. Winter is not the time for flowers here, although there are a few plants that do add some colour during the colder months. The impala lilies that grow up on the cliffs and in some of the open areas in the northern reaches of the concession have been lighting up the bush with their deep pink and white blossoms. The aloes have also been in flower and are still attracting the sunbirds, orioles, and starlings to the nectar feast. The flame combretums have also started flowering with blood-red stamens and stigmas. They also produce a lot of nectar and the sunbirds have been enjoying the sweet banquet that these flowers produce.

Normally at this time of the year, the N'wanetsi and Sweni Rivers have stopped flowing and only pools remain. This year is very different. We received a lot more rain last summer than we normally do and both rivers are still running strongly through the concession. There is still water flowing across Mbeki's Crossing and there are even water lilies flowering there. The Xinkelengane stream has stopped flowing now though, although there are still a few pools in this drainage line, and the animals are therefore still spread out throughout the concession. The grass is still long and lush throughout the area, although it has turned golden in colour. The thick grass layer has attracted quite a few zebras and wildebeest into the area. With all the grass and water in the concession, we are expecting great game-viewing next month.

Here's a Sightings Snapshot for July:

Lions

- The Shish Pride has formed the bulk of our lion sightings this month and has been viewed regularly in an area just to the north and west of the lodges. It seems as though the original five cubs (six months old) and the other three cubs (three months old) have been permanently moved away from their den sites found along the granophyre ridges east of Lebombo. On the morning of the 26th, the pride introduced us to two more additions, taking the total of cubs to 10. The pride has been found on a few kills this month and is thriving with the two Trichardt males.
- The Trichardt males have been spending the majority of their time with the Shish Pride and have therefore been keeping a large presence in the southern parts of their territory. They have pushed up to the central parts of the concession but only for a day or two at a time before making their way straight back south. These males have come into their own and are probably in the best physical condition they have ever been in. One standout sighting from the month was when the males had caught wind of the Mananga Pride and we watched as these males intently trailed the pride's scent until they eventually gained sight of the lionesses moving swiftly out of the area. The males closed the gap on the pride and managed to sneak up on the oldest lioness who was struggling to keep up with the rest. The males attacked her repeatedly but fortunately, she submitted immediately and the attacks weren't as harmful as initially appeared. The scuffle ended and they all settled down only a few meters apart from one another.
- The Maputo male and his new coalition partner, who have now collectively been named the Maputo coalition, have been seen on a few occasions in the north-central and north-western parts of the concession. They seem set on taking over this large vacant territory which comes with access to the Mananga Pride. They have often been heard vocalizing in response to the calls of the larger N'wanetsi male coalition and were observed one morning trailing and chasing four of the N'wanetsi males in the very far northern reaches of the concession.
- The Mananga Pride was seen several times throughout the month although in various portions of differing compositions. The coalition dynamics in the north between the Maputo males and N'wanetsi males have had this pride split up and on the run for some time now and we think it will still be some time before things settle down again for this pride. A very welcome surprise however came one morning when 14 members were found together (the largest portion we've seen for a few months) along with the last surviving Shish male! The guiding team had all thought he had either disappeared

out of the area for good or had been killed and so it was great to see him again looking in fairly good condition as well.

- The coalition of six who we have managed to identify as five members of the N'wanetsi Pride and a much older male who is the last surviving Sweni male have kept a continuous presence in the north-western sections of the concession. They are often heard vocalizing in the north or just to the west of the concession and when found are normally around Gudzane Dam. The young males seem to be growing in confidence day by day and we have seen one of the N'wanetsi males and the Sweni male mating with lionesses from the Mananga Pride. They do however seem to be down to only five members now as the last few sightings towards the end of the month have only consisted of four young N'wanetsi males and the Sweni male.
- On the morning of the 23rd, seven members from the Mananga Pride and the old Sweni male were found feeding on a large giraffe bull carcass. That afternoon, the Maputo coalition chased all eight off and fed on the carcass. The next morning, four of the Mananga lionesses were together with the Maputo coalition feeding on the carcass and continued to do so for the rest of the day. The following morning the Sweni male and four younger N'wanetsi males were feeding on the carcass with a further four large unknown male lions further south of their position. What happened next was incredible – with the old Sweni male having already moved off to digest his meal, the four larger males chased the four younger N'wanetsi males off the carcass and continued to do so for a few kilometres. After everything had settled down, we returned to find the old Sweni male feeding on the carcass. Having located the two Trichardt males earlier in the day, that took the total of male lions for the morning to 11. A fantastic morning safari!

Leopards

- The Dumbana 3:3 young male has continued to be our most viewed leopard with the majority of the sightings of this young male occurring around Pony Pan and the central depression to Green Apple Hill. He has been found on two separate baboon kills and is growing rapidly in both size and confidence. We viewed this male encounter and 'tree' the Mhlangulene female leopard and one of her daughters and witnessed very interesting behaviour when he scent-marked and vocalized at the base of the tree that the two female leopards were in. It is only a matter of time before he'll most likely move off for good but we are certainly enjoying still having him around. We didn't see the Dumbana 1:1 male at all during the month and it is safe to say that he has opted for a different path to that of his brothers and has dispersed away from the concession.
- The Mhlangulene female and her two daughters featured occasionally this month, and provided quality viewing when they did. The daughters are at the age of imminent independence and sightings of one or the other young females on their own are increasing. On the evenings of the 29th and 30th, the Mhlangulene female was found mating with the Pelajumbo male, further evidence indicating that she is preparing her daughters for independence. Mhlangulene is still however providing meals for her offspring and we can only hope that both young females continue to thrive and eventually set up a territory of their own within the concession.
- The impressive Monzo male leopard was sighted on four occasions this month all of which consisted of viewing the large male patrolling and scent marking through his territory along the N'wanetsi River.
- The Lebombo and Pelajumbo males were viewed on one and two occasions respectively during the month and there were no sightings of the Mbiri Mbiri male.
- Quite a few sightings were had of unidentified or unknown leopards this month. Most of these sightings were of relaxed young females in the north-western parts of the concession. Guides have photographed these individuals and are working on identifying them.

Wild dogs

- The Floppy Ear Pack was located on three separate occasions during the month. The dry winter months, when the grass is short and hunting conditions are at their best, is when wild dogs have their

pups. We suspect that they could be denning somewhere in Mozambique as they always come in from the east.

Spotted hyenas

- There were numerous sightings of these highly intelligent and often misunderstood predators. Most sightings were of lone individuals as they began their nightime hunting escapades, but family groups or clans were also seen. Spotted hyenas are excellent hunters as well as scavengers and they seem to be in the perfect place when any opportunity arises. Very similar to June, the clan often seen around Ostrich Link Open Area and the Ntsibitsane drainage system, managed to steal an impala carcass from the Floppy Ear Pack of wild dogs.
- There was also great viewing around the giraffe carcass once all the lions had left the area. Together with a multitude of various vulture species and some black-backed jackals, they fed on and finished off the carcass, justifying their importance in keeping the ecosystem clean and healthy.

Elephants

- Elephant sightings have been incredible and they have been seen every day of the month, barring one. Multiple breeding herds attended by impressive large mature bulls were viewed throughout the concession. During the cooler months, the breeding herds ascend onto the ridges in the evenings – this is due to the fact that the cold air sinks into the valleys and grasslands and they can become very cold. It was a common sight on early morning safaris to view the breeding herds on top of the ridges as they went about their foraging. As the sun got higher in the sky and the low-lying areas warmed up, they descended the ridges and continued feeding in the grasslands.
- Depending on the season, elephants will change their diet accordingly. During the wet summer months when the grasses are green and lush, they graze more and will feed on grasses. During the cooler winter months, when the grasses die back and the nutrients go back into the roots, they change their diet and tend to browse more and feed on trees, shrubs, and forest foliage. Elephants are bulk feeders and will feed on just about any available vegetation.

Buffalos

- Buffalo viewing has once again been excellent this month with two very large herds, one of +/- 500 and the other +/- 800, being viewed. Other smaller herds as well as the occasional single older bull were also seen. Buffalos plays a vital role in maintaining the health of open grasslands as they continue with their constant march in search of the best grazing. The urine and dung of these animals act as natural manure or fertilizer and return vital minerals and nutrients to the soil. The larger herds were concentrated around the basalt grasslands in the central and western parts of the concession.
- There is always excitement in the air when you view these large herds of buffalo as there is a good chance a pride of lions could be trailing them. The Mananga Pride was seen following buffalo on several occasions and they managed to bring one individual down on the 12th. The old Sweni male and the four N'wanetsi youngsters were also seen trailing the herds, and the two Trichardt males were found feeding on an old cow on the 19th.

Plains game

- The concession has once again been teeming with the general game. The N'wanetsi River is always packed with herds of impala, waterbuck, and giraffe while the occasional herd of nyala and lone bushbuck are seen when driving alongside the river on an afternoon safari. Further north in the central depression, plenty of plains zebra and blue wildebeest are spread out in the open clearings.
- Large bachelor herds of impressive kudu bulls can be seen on the ridges as they go about their daily foraging escapades. Due to the unseasonal winter rains, there are a lot of puddles of water spread out within the concession and the water-dependent animals do not have to travel large distances to quench their thirst.

- There have also been great views of the smaller antelope – steenbok, klipspringer, and Sharpe's grysbok.

Rare animals and other sightings

- There were a lot of sightings of the smaller nocturnal animals. African wild cats were seen on a few occasions as well as porcupines and small and large spotted genets. Just for interest, the easiest way to differentiate between the two is to look at the tip of the tale – the large spotted has a black tip and the small spotted has a white tip. A very relaxed civet was seen often on the road that takes you up to the lodges, this road aptly named Civet.

Birds

- A capped wheatear was seen at the beginning of the month at Cassia Clearings. This is not a common bird for the area and there was a lot of excitement when this bird was found and identified.
- A black-chested snake eagle was seen on a few occasions. While not uncommon, we don't see these birds that often on the concession. As per their name, these birds specialize in hunting smaller snakes but have been seen feeding on large cobras. They also feed on lizards, frogs, rodents, and insects and have even been known to kill and eat fish. They hunt by soaring or hovering on winnowing wings. Attacks can take place from up to 450 meters away, but the bird often descends in stages before plunging feet first onto prey. By using their strong powerful feet, they strike their intended victim behind the head which crushes the skull. Snakes are swallowed whole while other food items are stored in the crop.
- A female greater painted snipe was seen on a few occasions. These birds are one of the few species found in southern Africa that are polyandrous which is the opposite of polygynous. This means that the female will lay a clutch of eggs and does nothing further. All the incubation and raising of the chicks is the responsibility of the male. Other notable birds that practice this are the African jacana and the common buttonquail.

The granophyres **Article by Damin Dallas**

The Kruger National Park concession at Singita offers an unforgettable experience, and a must-see highlight is the renowned granophyre rocks. These ancient monoliths create an otherworldly backdrop for an ultimate bushwalk, allowing you to explore them on foot alongside your knowledgeable guide.

Within this area, you'll discover a diverse range of plant and animal communities that will captivate and intrigue you for years to come. The sheer beauty and almost extraterrestrial structure of these rocks are mesmerizing.

Embarking on a typical morning walk along this ridge will lead you to a spectacular lookout point over the beloved N'wanetsi River, where you can observe the gorge below and hear the echoes of the local hippo pod, breaking the morning silence.

Despite the tranquil and peaceful setting, it's hard to fathom that this very location was once the epicentre of violent volcanic activity millions of years ago. The name granophyre comes from the rock's similarity to granite and porphyry. It is an igneous or volcanic rock with irregular crystals of intergrown quartz and alkali feldspar embedded in a groundmass of these minerals.

To put it simply, many years ago, around 90-180 million years ago, the Earth's crust cracked open, leading to vast amounts of magma surging up from deep beneath the surface. The lava cooled rapidly and formed the Lebombo Mountains, primarily composed of a rock called rhyolite. The cracks that allowed the magma to rise were sealed by these rhyolites, but the magma trapped within them cooled over time, solidifying into the rock we now know as granophyre.

Through weathering and erosion, the softer parts of the rock were gradually worn away by natural forces, leaving behind the enduring and awe-inspiring granophyre ridge that characterizes parts of the Lebombo Mountains.

Walking amongst these impressive 'fire fossils' offers a deeply rewarding experience. When you visit this extraordinary part of the world, be sure to take the time to explore and marvel at the uniqueness of the granophyre rocks.

The uncanny beauty of winter **Article by Sean Surtees**

When one thinks of the winter landscape here at Singita Kruger National Park, one would be forgiven for associating the flora with dull browns and greys as the multitude of grasses begin to dry out and the deciduous plants lose their leaves. The summer annual flowering plants have done their job and have since died off while most of the summer perennial flowering plants have gone dormant. But, if you look closer, there is an abundance of colourful plants that thrive under winter conditions with beautiful bright pinks, oranges, reds, and yellows dotting the landscape.

This leads to the question, "Why do plants bloom at different times of the year?". To answer this question, we would first have to differentiate between the different lifecycles of plants. In flora, there are summer annuals, winter annuals, biennials, and perennials. But what exactly are these?

Annuals, whether summer or winter, have one season to produce. Not much is invested to create an expansive root system as making roots and flowers costs energy. They, therefore, focus their energy on flower and seed production. Summer annuals germinate in the spring, flower in the summer, and generally die by autumn/fall. Winter annuals germinate in the autumn/fall and flower and produce seed during the winter.

Biennials live for two years with the first spent growing foliage and building the required energy for flowering. In the second year, a flower stalk shoots to create seeds for the next generation, and then the plant dies.

Perennials survive year after year. Therefore, they can invest their time into their root resources, before needing to flower. A perennial may not flower for its first two to three years when grown from seed. This is because there's a lot of work taking place below ground on building a root system.

Even with these lifecycle categories, plants still flower at different times of the year. This leads us to the next reason for this – competition. Nature is focused on competition over resources. One resource is space – if every plant grew and flowered at the same time there would be a demand on the physical area, like soil and access to water. The same can be said for pollination. Winter plants have more access to pollinators as they have evolved a flowering timeframe during the cold winter months when summer plants have either died out or have gone dormant.

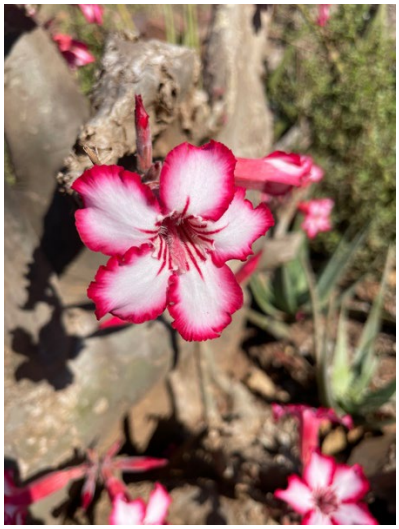
The next question we need to understand is why deciduous plant leaves transform from green to bright yellow, red, and orange and eventually drop off as the cooler winter months approach. In winter, it takes lots of energy and water for plants to keep their leaves healthy. Here at Singita Kruger National Park, the winter is cool to mild, and dry and there is less sunlight as in the hotter spring/summer months. Sunlight is very important in giving plants energy. Therefore, instead of keeping their leaves, some plants drop their leaves and seal the spots where the leaves had been attached.

How is this related to what makes leaves colourful? Leaves get their colour from pigments. The pigment that results in leaves being green is chlorophyll which is important for plants to make food using sunlight. During the summer, when there is plenty of sunlight, plants produce a lot of chlorophyll. When autumn/ fall arrives and it starts to get colder, some plants stop producing chlorophyll. Instead, these plants break down chlorophyll into smaller molecules, and, as a result, other pigments start to show their colours. This is why leaves turn, yellow, red, or orange in the autumn/fall and winter and eventually fall off. Colour change generally happens before the leaves fall off the plant because it takes a lot of energy to produce chlorophyll. Plants save energy by breaking down the chlorophyll and moving it out of the leaves before they fall off, and reabsorb the molecules that makeup chlorophyll. When it's warm and sunny enough to grow again, plants can use those molecules to reproduce the chlorophyll, and not have to make chlorophyll from scratch.

There are other pigments in leaves known as carotenoids which are yellow and orange. Anthocyanins are pigments that are only produced in autumn/fall which result in red, pink, or purple colours and they protect the leaves from being eaten or getting sunburned.

Let's look at some of the prominent colourful winter plants that occur here at Singita Kruger National Park:

Impala lily / Sabi star *(Adenium multiflorum)*

A succulent shrub, resembling a miniature baobab, with vibrant white, pale pink to dark pink trumpet-shaped flowers which are found in bushveld, open sandy woodland, rocky outcrops, and brackish open areas. Do not be fooled by the beauty of this plant though as it has a poisonous watery latex that contains cardiac glycosides. This could cause death within a few minutes due to heart failure if ingested. More than 30 different glycosides have been isolated from the stems of this plant.
In the past poison from this plant was used while fishing and the latex was used as a poison on arrowheads when hunting.

Candelabra *(Euphorbia cooperi)* and Lebombo euphorbia *(Euphorbia confinalis)*



Both of these are spiny, succulent trees with *E. confinalis* prominent along the rocky ridges and hilltops, while *E. cooperi* is more prominent in wooded grasslands but can also be found on rocky ridges.
Both species have bright greeny-yellow flowers when flowering, with E. cooperi's flowers being more prominent. The flowers are high in nectar, attracting chacma baboons and vervet monkeys, as well as a wide variety of birds and insects. The fruit, on both species, is maroon-red and is also eaten by primates and a wide variety of birds.

All euphorbias have a milky white latex which is highly poisonous. The latex of *E. cooperi* is the most poisonous of all the euphorbias, resulting in its other name ‘deadliest tree-euphorbia’. Blindness can result if you get the latex in your eye and it can cause intense skin irritation if you get it on the body.

Mountain aloe *(Aloe marlothii)*


A tall, single-stemmed tree aloe, found in bushveld and wooded grasslands, but which predominantly grows on the rocky ridges here at Singita Kruger National Park. The bright orange flowers appear from June to August - a magical sight when viewed in full bloom. The flowers attract birds, particularly sunbirds, as well as a multitude of butterflies and other insects. This plant has a watery latex or sap which is locally used to treat stomach ailments and roundworm infestations.

Tamboti *(Spirostachys africana)*



Part of the euphorbia family but it is not an actual euphorbia like the candelabra and Lebombo euphorbias, but rather an actual tree. It does however have the toxic milky latex which is a feature of all euphorbias. The entire plant is toxic and even the smoke from burning the wood can cause nausea and even death.

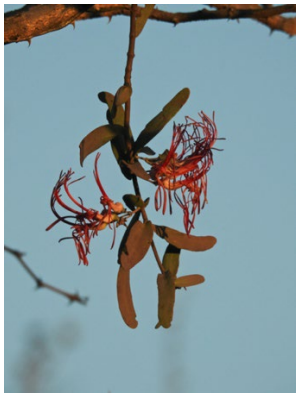
The beauty of this tree lies more with the leaves than with the flowers. During autumn/fall, the green leaves slowly transform into brilliant yellows and reds before falling off. This is the result of the chlorophyll moving out of the leaves and the carotenoids and anthocyanins appearing in their absence. It is a wonderful sight to see a large tamboti thicket with its yellow and reds against a dull brown background.

Long-tail cassia *(Cassia abbreviata)*


The flowers of this tree, which usually appear before the leaves, are a stunning bright yellow. The leaves are a bright green and, together with the flowers, really stand out in the bushveld savanna against the dullness of the winter background.

The fruit of this tree is distinctive and resembles a sjambok (leather whip) hence the other common name sjambokpod. The fruit attracts a multitude of birds, including parrots, grey go-away birds, barbets, and different hornbill species. The tree is believed to have magical properties and traditionally meat cooked over the wood was thought to ensure future success when hunting.

Plicosepalus kalachariensis - *Loranthaceae* mistletoes

A winter flowering mistletoe, this plant is a clump of vegetation that attaches to the branches of various tree species, particularly *Senegalia/Vachellia* (acacia) species. One tree in particular which is the host for this parasite here at Singita Kruger National Park, is the knobthorn acacia *(Senegalia nigrescens).* It has bright pinky-red flowers and spreads throughout the knobthorn using epicortical roots that anchor into the tree with suckers. As mentioned, this plant flowers in the winter months, with the fruit ripening at the peak of the dry season. The flowers are an important food source for nectar feeders, particularly sunbirds which, together with certain insects, assist in pollination. Barbets, tinkerbirds, and other frugivore birds are never far from this parasite when in fruit, playing a vital role in seed dispersal.

July Gallery

A young bull elephant silhouetted by the setting sun – by Sean Surtees.

A tower of giraffe – by Sean Surtees.

One of the Trichardt males announcing his presence – by Sean Surtees.

Six of the ten Shish cubs – by Sean Surtees.

A breeding herd of elephants making their way to a pool of water in the Xinkelengane drainage – by Sean Surtees.

The old Sweni male and seven lionesses of the Mananga Pride feeding on the giraffe carcass – by Sean Surtees.

The Maputo male lion feeding on the giraffe carcass – by Sean Surtees.

The other member of the newly named Maputo Coalition, named Xai Xai – by Rudi Hulshof.

A lone spotted hyena feeding on the remains of the giraffe carcass – by Sean Surtees.

After a lot of patience, the vultures finally got their turn at the carcass – by Sean Surtees.

One of the Shish lionesses resting on the rocks of the Granophyres – by Amy Leigh Roberts.

One of the newest additions to the Shish pride – by Rudi Hulshof.

Dumbana 3:3 male leopard – by Rudi Hulshof.

Buffalo on a cold misty morning – by Rudi Hulshof.

A heavily pregnant zebra mare – by Rudi Hulshof.