



Hello Olifants community!

We hope you are all well, safe and warm after a very interesting month in South Africa's history. We have survived the third wave of a global pandemic, the unrest in KZN and Gauteng , as well as the artic record-breaking temperatures of one of our coldest winters. Despite all this drama, in inimitable style, South Africans are ever-resilient and positive even after such hardship and still driven to make this world a better place. As always and particularly in these turbulent times, Olifants remains a true retreat...a place for our members and users to disconnect, re-set and let nature do its healing.

THE GAME DRIVE

As usual, ORGR is producing some world-class game viewing and we are heading into the peak conditions between July and November. The cheetah have been an absolute treat the last few months with multiple sightings recorded. One day, four were spotted together at a single sighting, much to the delight of all those who had the privilege of seeing them! They are regularly seen between Sunset Plains and Sable Dam in the open areas. Predator sightings remain high with plenty of leopards appearing throughout the reserve and both resident lion prides being seen frequently. Elephant numbers have been on the increase, as expected during the dryer months of the year. The wild dogs have not been too active in our area recently, more than likely due to them denning and not venturing out too far from the site.

Again, the Pom Pom Pride have been seen lounging around on Lawrie's Lookout, which is obviously a perfect observation spot for these big cats. No wonder they love it so much!



Feature Article: The Elephant “Problem”

Africa Geographic (Edited)

There are many strongly held views and beliefs about elephants and how they should be managed. Many of these are not based on science but on casual observation, cultural norms, stories and ‘experience’ (all of which vary widely, inevitably coloured by myriad human biases).

HISTORY

Let’s take a quick look at the history of elephants in the Lowveld of South Africa. When the Sabi Game Reserve (roughly the southern half of the present-day Kruger National Park) was proclaimed, there were fewer than ten elephants left in the area. Voracious ivory hunting had denuded the area of these great creatures. While many thousands were killed for their ivory, many upped sticks and left the neighbourhood for fear of falling to our insatiable desire for their teeth. This situation had been escalating for a century or more until the herds that used to roam what is now the Kruger disappeared. Elephants are a keystone species. In other words, if you take them out of an ecosystem, then that system will change. We do not have accurate records of the vegetation of the greater Kruger area prior to the arrival of the ivory hunters. When they arrived, they didn’t take particularly accurate measurements of the vegetation structure or pay too much heed to the composition of the grass sward as they blazed away.



The point of this trip back through time is to illustrate that we do not know what the vegetation looked like before the colonialists started blazing away, mad with ivory and blood lust. This is important because this lack of knowledge has not stopped us from assigning dogmatic, ideal variables to how the vegetation should look and then attempting to manage the biggest architects of the system based on supposition and unscientific dogma.

HOW DO ELEPHANTS AFFECT VEGETATION?

There is no question that elephants break trees – debark, push over, stunt. But in the process, they provide habitat for other species, disperse seed, fertilise the landscape, and open up woodlands. In open systems, they seldom, if ever, destroy ecosystems irreversibly. They’re massive animals, so their effect on vegetation is obvious to the casual observer, but the effect of their absence really isn’t immediately obvious at all (yet it is no less profound).

Research indicates that one to four percent of trees are destroyed by elephants each year in the protected areas of Southern Africa. This level of loss may be supportable, but at the same time, it must be appreciated that this kind of utilisation will change the structure of the vegetation. It is also important to understand that elephants are not alone in their destruction of trees (from seedlings to much larger individuals – for example, there is evidence to suggest impala eat a far greater volume of tree seedlings. The combined effects of other herbivores, fire, flood, drought and disease all contribute to tree survival rates. Elephants have an especially noticeable effect on the vegetation along riverbeds. Much concern is expressed about the destruction of marula, thorn trees and baobabs in Southern Africa. Little heed is given to three important factors here, however: There is a natural die-off of hardwood species and prolonged decay and thus an accumulation of ‘destroyed wood’. The rinderpest epidemic and over-hunting cut a swathe of destruction in the early 1900s, decimated wildlife populations and numbers didn’t recover for at least 50 years afterwards. Clearly, this lack of animals provided an opportunity for unusual woodland development, especially along the riverbanks. The current usage patterns and vegetation structure in these areas are likely more ‘natural’, and this is reflected in floodplains throughout Southern Africa.

LIFE'S MOST PRECIOUS RESOURCE

Elephants seldom go further than ten km from water but ideally like to be within five km. When food in the vicinity of water depletes, then elephants will move further afield. This movement creates stress, especially in drought times and has a negative effect on calf survival. Artificial water clearly removes this effect. In the large protected areas of southern Africa, water is concentrated in perennial rivers and, during the wet season, in annual streams and seasonal pans. This distribution of water means that during the dry winter, elephants (and other animals) will congregate along perennial water sources and spread out during the wet summer. Clearly, movement like this will allow a heterogeneous use of the landscape by browsing and grazing herbivores.



Up until 1994, more than 300 artificial water points blossomed in the Kruger. Unsurprisingly, the elephant population increased. This was great initially because wildlife needed to be nurtured – it was recovering from more than a century of pillage. But the maintenance of the water points into the 1990s was ill-advised. Likewise, the provision of water in Hwange National Park, Etosha National Park and Chobe National Park accentuated the impact on vegetation in the vicinity of the water. It intensified die-offs during droughts (and still does in some cases). It is not only elephants that benefit from the provision of artificial water. Wildebeest, zebra and impala (particularly the latter two) are highly dependent on water and will not stray far from it. When their numbers increase in the presence of artificial water, they outcompete some species and attract predators. More mixed feeders like impala mean a greater toll on tree seedlings. In the Kruger, this meant the demise of healthy sable, roan and eland populations and also the local extinction of brown hyena.

If we look at the private reserves on the western boundary of the Kruger, we see a patchwork of tiny properties with landowners all managing for their (or their tourists') needs. All the little properties have numerous dams and pumped pans. Many are the times I've heard landowners bemoaning the fact that the elephants are pushing down trees but not making any connection to the fact that by pumping water, they are ensuring that the elephants don't ever have cause to leave their land. Pumping water means that the most desperate times (droughts) – when trees are most likely to be pushed over for forage – are precisely the times when elephants will concentrate on their land.

HETEROGENEITY – A KEY MANAGEMENT OBJECTIVE

The key goal for most conservation organisations is to improve and maintain biodiversity. One of the ways of achieving this is to manage areas for maximum heterogeneity. In other words, management for an area like the Great Limpopo Transfrontier Park (GLTP) needs to maximise the number of different habitats. Some of these will be prime areas, some marginal, some vacant, some occupied. Densities should vary naturally across time and space in accordance with patchy resource availability. In large enough areas, this heterogeneity of landscapes would, ideally, result in subpopulations that will vary in number, growth rates etc. These would then be managed through the lens of a metapopulation.

One of the ways that the Kruger is currently aiming to do this is by closing waterholes and leaving large areas with no artificial water. Between 1995 and 2008, Kruger management reduced the number of waterholes from 340 to 116. This allows less water-dependent species to flourish in the absence of competition from those that are more water-dependent. Indeed SANParks management initiatives focus on spatial manipulation to control impact rather than 'command and control' approaches used between the 50s and early 90s.

Reducing artificial water is probably the most important intervention we can make. Closely distributed waterholes cause uniform impact over an area, reduce roaming distances, and reduce stress on young elephants, increasing their survival rates. Closing water points results in more intensive use of vegetation around water, which could cause stress on calves and reduce population growth. At the same time, vegetation away from water can recover. Clearly, this only applies to large heterogeneous areas and not to small, fenced reserves where much more direct management of elephants is required (contraception, translocation etc.). The larger the area, the greater the chance that elephants will experience a variety of living conditions that could limit their population growth rates across the region and possibly across the continent.

THE WAY FORWARD

Ideally, elephant areas need to be joined with corridors and augmented with buffer zones to create a variety of landscapes and habitats and uneven use of vegetation. In many parts of Africa, elephants roam widely out of protected areas – which are also important repositories of biodiversity, even when people are present. It is here that human-elephant conflict must be mitigated, and people who are expected to live with elephants should benefit from their conservation in some way. As distasteful as this may be to many of us, arguments in favour of hunting must be heard. Adaptive management is also crucial – the questions are complex and require dynamic solutions based on a constantly changing knowledge base. We need to continually re-think conservation and management, especially of keystone species that are both emotive and emotional. The ‘command and control’ approach to keeping the ‘balance of nature’ is no longer in vogue outside of small parks. It has given way to approaches that aim to mimic the dynamism of natural systems. Modern approaches focus on land and ensuring the integrity of ecological processes rather than on elephant (and other species) numbers. In the case of elephants, this means excluding them from sensitive areas and restoring areas by removing artificial water (as has been done in Kruger). Transfrontier parks also play a massive role – the fewer fences we have, the more easily elephants can move between protected areas. The less concentrated their effects will be as long as we do not discourage emigration by providing water.

Has any of this actually been tested? Yes, in the GLTP and the Kruger. When culling ended in 1994, there was a massive growth in elephant numbers, but since 2003, the growth rate has slowed (from 6.5 % during the culling period to roughly 4.2%). Growth rates in areas more than five km from water fluctuate without trend, and those within this five km zone are constant [2]. In 2017 there were an estimated 19 927 elephants in the Kruger National Park. Will it level off? We don’t know yet but quite possibly given the landscape management (as opposed to numbers management) of the GLTP. Encouragingly, come 2012, 22 of 36 elephant populations across East and Southern Africa had stabilised for roughly a decade. It is not certain that this will remain the case forever, but it points to natural processes limiting elephant numbers.

As human beings with an interest in nature, it is imperative that we understand that we do not have the historical records or ecological understanding to be implementing ‘command and control’ approaches to the conservation of keystone species in large protected areas. We have to manage the land for heterogeneity and do our best to mimic nature while accepting that anthropogenic landscape changes are irreversible in some places. We also have to accept that sometimes, as a very last resort, lethal measures may be necessary.

So, do we have an elephant problem? It depends on your perspective, where you live, what piece of land you are referring to and what your goals are. As with all things in nature, it is a question with answers more complicated than our current understanding.



Conservation

Security Update

The threat to our natural resources on the reserve remains extremely high with the criminal syndicates operating their gangs of poachers throughout the region. The recent public execution of the local King Pin has shown there is a change of power within the ranks and we expect an elevated level of criminal activity as the new masters move in.

The evolution in our security capabilities in the last two years has been astounding with the developments in technology, K9 capabilities and a team of passionate people driving and pushing us to the next level. We are now able to run full night operations in complete darkness without giving our locations away to the criminal element thanks to our thermal and nightvision technology and the availability of the night-accredited helicopter, piloted by the incredible Jana Meyer. Our team has worked hard to get to this level of operation and we are currently leading the industry with these tactics. Our K9s are also now running full night operations in complete darkness. These capabilities were a complete fantasy a few years ago and it is extremely exciting that all the hard work, investment and training has made this dream a reality.



RAILWAY UNDERPASS STUDY – Hannah de Villiers

Those of you who have been on the reserve lately may have noticed some cameras positioned on trees and posts all along the railway road. That's because, as part of my Masters (MSc) in Conservation Biology, in partnership with the Endangered Wildlife Trust, I am researching animal behaviour and movement around our railway line, focusing specifically on animals' usage of the underpasses. This involves monitoring the underpass entrances using camera traps, from July 2021 until April 2022, to understand which species use them or don't use them, and why.





Why is this research important? Rail is expanding globally as it is the most sustainable form of transport. In Africa alone, more than 30 massive development corridors, including rail infrastructure, are planned or progressing. As a consequence, the rail footprint on the continent is expected to increase by 85% (55,000 km) in the coming years. Unfortunately, these corridors will cut directly through 400+ protected areas (like Balule) containing some of earth's most diverse and sensitive ecosystems.

As conservationists, we are concerned about two key ecological impacts of railways: firstly the mortality it might cause through wildlife-train collisions, which we are all-too-familiar with, made worse because trains cannot suddenly slow down or swerve to avoid a collision. Secondly, the physical and behavioural barriers to wildlife movement and resultant habitat fragmentation it may cause for local wildlife populations. In fact, road and rail infrastructure are one of the largest drivers of habitat loss and fragmentation, and therefore biodiversity loss, worldwide.



But what if animals could find a safe passage across the railway without the risk of collisions, thereby improving habitat connectivity? Underpasses provide just that. In fact, culverts or viaducts are a common design feature of all railways, typically built for hydrological purposes. These pre-existing underpasses can easily be modified to improve their use by wildlife, which is the most economical and feasible form of mitigation for railways' effects. The findings of this research will hopefully help inform the design of effective wildlife underpasses along new railways in Africa, and aid in feasible modifications to culverts along existing railways to improve their usage by animals.



VERY early observations are that carnivores (leopard, porcupine, civet, genet, honey badger, mongoose) appear to be the predominant users of these structures. Nimba is a frequent visitor! Smaller herbivores (such as duiker, Sharpe's grysbok, steenbok) often look in but are deterred from entering - now to figure out why.... Larger

herbivores appear not to be using them frequently (often because they simply can't fit in, e.g. elephant and giraffe). The effect of structural dimensions, the nature of the habitat close to the structure, the surrounding landscape, and mammal characteristics on usage of these culverts will be monitored.



Please feel free to get in touch on Telegram if you have questions or have observed anything interesting with regards to animal behaviour around the railway or culverts. I also welcome any and all photos/videos you might have taken - old or recent - as I'm sure interesting things have been seen over the years!

REACHING OUT

Vusi Sibuyi, an employee of Olifants River Game Reserve (ORGR) in Balule, who started a six week Field Ranger's training course at the SA Wildlife College on 17th May, passed with flying colours and stood out above the rest with top marks. Needless to say, he is one extremely happy young man!

Vusi was first noticed whilst employed at the main gate at ORGR as a guard. His "can-do" and "on the ball" attitude impressed the ORGR management team and Vusi was invited to join ORGR as a junior ranger. In this position, Vusi further impressed both Nick and Callan, mainly due to his enthusiasm and work ethic. Vusi was keen to further his qualifications so approached management for a loan to study at the college, at which time the board suggested approaching the Balule Outreach Trust (BOT). Vusi's course was funded entirely by the BOT, without hesitation – and the rest, as they say, is history!

As the breadwinner of his family (comprising his parents and two brothers) Vusi is delighted that he will soon be promoted to a senior field ranger which will not only allow him to fulfil his dreams of protecting wildlife, but also to become more effective in providing for his family.

Says Vusi, "I feel this career is a calling. I am passionate about nature and determined to preserve the wonderful flora and fauna we are gifted, currently and for the generations to come. I hope to inspire my two brothers into following in my footsteps and thank everyone involved for giving me this hand-up to making a difference in the area of conservation".

EDUCATIONAL BOOKLETS FROM THE TANGLEWOOD FOUNDATION

The Tanglewood Foundation sponsored Blue Sky Society Trust to produce an educational booklet on conservation, four-hundred of which Peter Eastwood has donated to the ORGR/Balule Outreach Trust for distribution to children in the local communities. These will be highly effective in promoting a vital conservation ethic and we are extremely grateful for this valuable gift. The booklets, written in English, have been translated into isiZulu and may soon be produced in Portuguese, for distribution to other parts of the country.



SIGAGULE LITERACY PROGRAMME

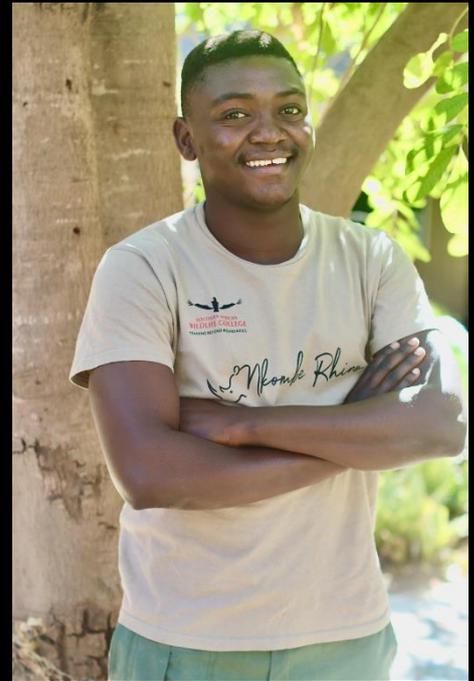
A few weeks ago, the South African Medical Expedition (SAME) in Sigagule added English dictionaries to their wish list and within a day we had 60 donated by a generous sponsor in Johannesburg! We've added some second-hand ones too, kindly donated by various sources and will be able to provide some to Maseke as well.

GENERAL DONATIONS

Ongoing support from ORGR members by way of donations is heartening. We have collected blankets, shoes, text books, rainwear/winterwear, underwear and stationery on a regular basis and we thank everyone for their efforts and generosity.

The Balule Outreach Trust continues to provide outstanding support to the SAME Foundation for the Sigagule community and to the Maseke Drop-in Centre by providing valuable food parcels every month. This would not be possible without the support we have from our members and other donors.

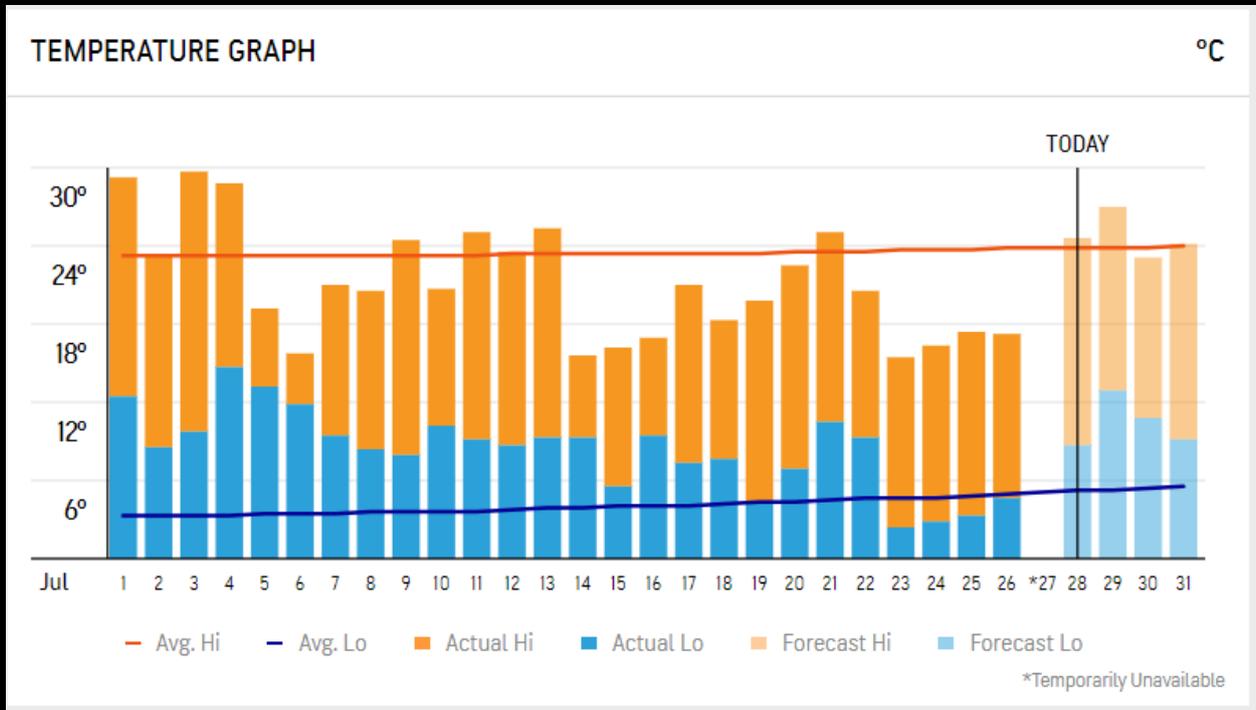
If you wish to be added to the ORGR Outreach WhatsApp Group, please contact Susan Harwood on 0832282546.



MEMBERS UPDATE

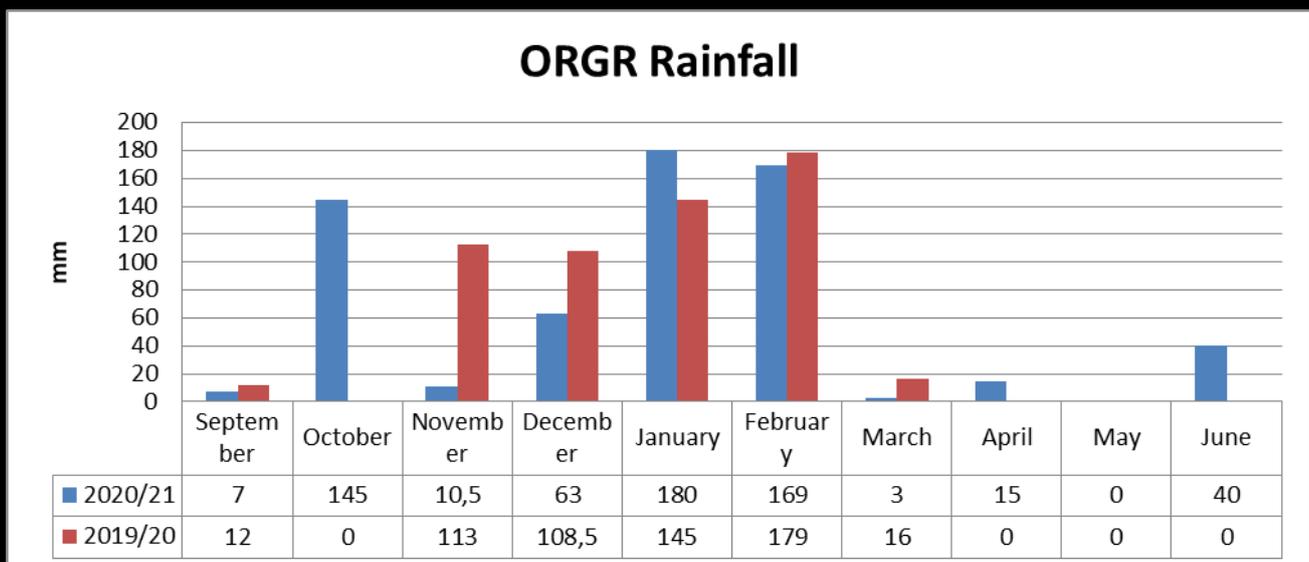
THE WEATHER REPORT

Although we have had a moderate winter up until mid-July, the real winter chills graced us from mid-month with minimum temperatures dropping below 10 degrees and touching on five degrees on a few very cold mornings. Not as icy as the rest of the country, but cool by Limpopo standards.



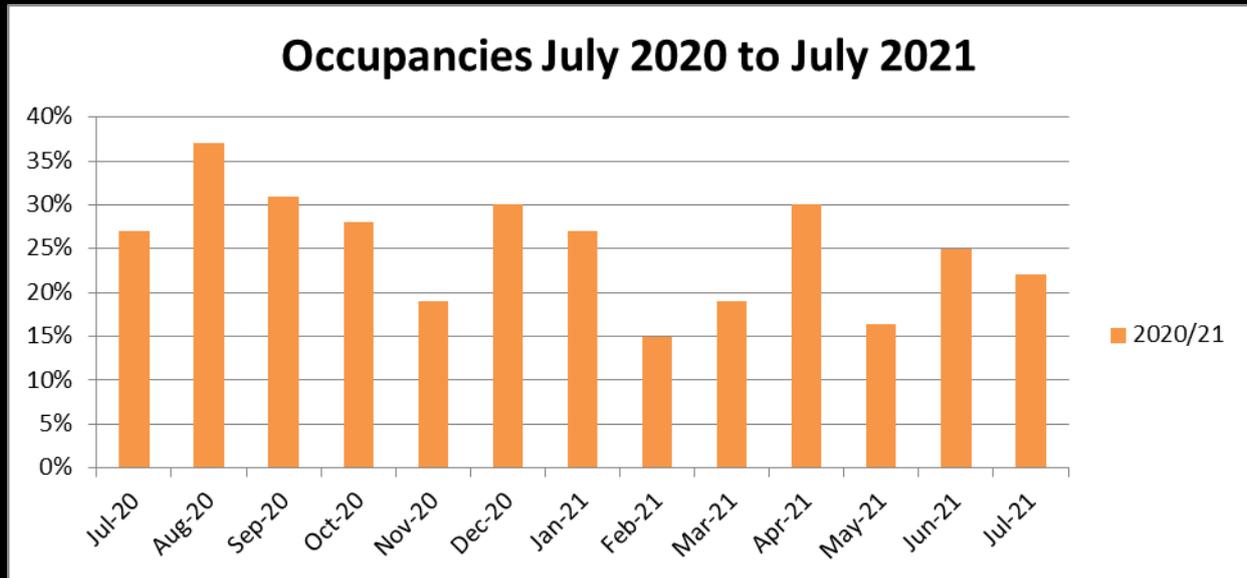
June saw 40mm of rainfall at the beginning of the month in an unusual winter thunderstorm bringing our annual total up to 632,5 mm. This extra winter rain has been very welcome to settle the dust on the reserve and has allowed us an opportunity to work on the roads using the wet conditions to our advantage.

Rainfall 2020/2021 compared to the previous season



OCCUPANCY

June ended off with an average occupancy of 25% - a fairly busy month. We peaked at 37 units in residence during mid-month and our quietest day saw only seven units occupied. July ended off at 22% of the units in residence with an average of 20 units in residence at any given point. The beginning of August looks to be a busy time with lots of members arriving to enjoy the reserve. Our annual average for the past year has increased by another per cent to 25%.



August 2 - Saturn at Opposition. The ringed planet will be at its closest approach to Earth and its face will be fully illuminated by the Sun. It will be brighter than any other time of the year and will be visible all night long. This is the best time to view and photograph Saturn and its moons. A medium-sized or larger telescope will allow you to see Saturn's rings and a few of its brightest moons.

August 8 - New Moon. The Moon will be located on the same side of the Earth as the Sun and will not be visible in the night sky. This is the best time of the month to observe faint objects such as galaxies and star clusters because there is no moonlight to interfere.

August 12, 13 - Perseids Meteor Shower.

One of the great astronomical treats will be visible in the night sky in the coming week for some South Africans with the Perseid Meteor shower reaching its peak in the early hours of Tuesday morning. The Perseid Shower is a favourite for many stargazers as it has more bright meteors than most showers - sometimes as many as 50-60 per hour under ideal conditions. This year the shower is compromised by moonlight so only the brightest meteors will be visible until moonset. Views of the shower will be best in the Northern parts of the country with little to no visibility South of Gauteng. The shower will peak across the evening of Monday 12 August into Tuesday morning. Stargazers in Johannesburg and further North will enjoy the best views. Because the shower will be confined to just above the horizon it is best to seek out a spot with an unobstructed view, preferably away from sources of ambient light.

WHAT IS THE PERSEID METEOR SHOWER?

Made of tiny space debris from the comet Swift-Tuttle, the Perseids are named after the constellation Perseus. This is because the direction, or radiant, from which the shower seems to come in the sky lies in the same direction as Perseus. The Perseids are widely sought after by astronomers and stargazers because most years at its peak, one can see 60 to 100 meteors in an hour from a dark place.

New Perspectives!

We have completed the upgrades to Andy's Lookout and are very happy with the results. The facility is simple, functional and beautiful. A photograph of the "new" site, which is ideal for sundowners, appears at the end of the Newsletter.

The Rhino Pan Hide upgrade is also finished and it is looking spectacular! The whole experience at this iconic site has been improved whilst its original charm has been maintained. Be sure to visit this spot on your next visit to the reserve.

We hope you all enjoy these impressive changes!



Night Drive Spotlight Protocols

We would like to implement a Spotlight Policy to prevent certain species from being disturbed at night. Cheetah and wild dogs should not be spotlighted after dark. These animals are diurnal hunters and it is unethical to use a spotlight (including the use of a red filter) on them at all. Once the sun sets, these species should be left alone. Remember that night game drives are intended to observe animals of the night, NOT just all animals at night. Members and users need to differentiate between diurnal (active during the day) and nocturnal animals to know which ones should be observed. Diurnal animals can be irritated by lights at night, especially since this is the time when they are resting and staying vigilant for evening predators. We will be updating the Game Drive Rules and Regulations and posting these updated documents onto the Website soon.



USA KIDS JUMP IN TO SAVE THE RHINO IN SA!

Patrick and Brigitte Daly, longstanding members of ORGR have grandchildren who run an NPO in Tampa, Florida. KIDS 4 A CAUSE, as the organisation is known, raises funds for numerous causes and has very strong ties to ORGR. Their July project was a particularly poignant one as they set up Back-a-Buddy funding in order for people to donate funds for our Anti-poaching Unit in the fight against rhino poaching.

The dynamic young men raised US\$3000 - enough for us to purchase seven more cameras that are vital in the process of detecting incursions and human activity, to catch poachers!

We have to expand our already extensive network of these AI cameras on an ongoing basis to assist the AP teams. Using these cameras, coupled with our team, the K9 operatives, our night vision capabilities and a never-give-up attitude, we endeavour to save the Rhino species and the gift of these seven new cameras will go a very long way to making this happen. We are incredibly grateful, impressed and blown away by the superb efforts of this dynamic young team. Hopefully, they will inspire other youngsters abroad and locally to do the same.

The fantastic four, namely Dominic & Sheldon Fouche and Michael & Christian Kuhn are committed to continually raising funds for this cause. Take a look at their website and their Facebook page to watch their inspiring video, featuring Nick, Callan and the APU team!

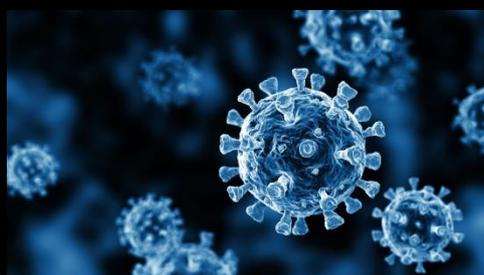
<https://www.facebook.com/kids4acause888>

<https://kids4acause.org/>



Covid 19 Protocols

The third wave of infections is slowly losing momentum and we have opened up all public areas on the reserve again. However, we would like to keep some protocols in place, including the Covid Housekeeping Policy until mid-August as we are seeing a huge influx of members and users into the reserve in the first half of the month. We will reassess the risks mid-month and send out communications once the situation has been reviewed.



Hamba Kahle Joachim Ntimani

This month we say goodbye to an ORGR stalwart. Ntimani has been part of the Olifants family for thirty plus years and has worked as a Field Ranger for most of the time with the organisation. He will be retiring from his work responsibilities to enjoy the golden years of his life in peace and tranquillity at home. This legend of a man played a vital role in the protection of our wildlife on the reserve over the decades and will be sorely missed. We wish him all the best in his retirement and his forthcoming period of rest is well deserved. Ntimani will be generously looked after by Olifants and we have put together an attractive retirement package for him.

Hamba Kahle Buti!

There will be a few more retirements within the next six months and you may rest assured that these long-standing staff will leave our family with a handsome "Thank You".

Well, that's all from us for July. We hope you all stay well and we look forward to seeing you at Andy's for sundowners sometime soon!

Warm regards

Nick, the management team & staff

