

# *African* WILDLIFE ISSUE 78 (2021) & ENVIRONMENT

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**WESSA EDEN**

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AT THE BRINK**

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THE MAGAZINE OF THE WILDLIFE AND  
ENVIRONMENT SOCIETY OF SOUTH AFRICA



**WESSA**  
PEOPLE CARING FOR THE EARTH

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Cover photograph: John Wesson



Conservation in suburbia



An indigenous wonder cure



Rhinos at the brink!



Deadly forest predator

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# RHINOS AT THE BRINK!

In January 2021, South African National Parks (SANParks) announced the poaching statistics and the impact it has had on both the Black and White Rhino populations. There has been a decline of 70% of the population since 2010, and this has been in the flagship of National Parks in South Africa, the Kruger National Park (KNP).

**Bryan Havemann**

This news really hit home for me, as an ex-ranger from KNP where I conducted wilderness walking trails for many years, and was a section ranger at Stols Nek. This area had one of the highest concentrations of both White and Black Rhinos anywhere in the world, and as a section ranger I was always aware of the huge responsibility one had as a custodian of these magnificent pachyderms.

With the COVID-19 pandemic in 2020, the resulting measures through various levels of lockdown helped to reduce rhino poaching in South Africa, because of the restriction on movements. During this lockdown period I was



appointed as the new general manager for the Selati Game Reserve, from October 2020. This is a 'Big Five' reserve of 27 000 hectares in the Limpopo Province of South Africa. Once again as a custodian of both White and Black Rhino, I was acutely aware of the responsibility in keeping these and the other wildlife on the reserve safe.

anterior and posterior horns had been hacked off by poachers using a saw, and leaving all the tell-tail signs which would all be captured by the investigating team. This was now a crime scene!

The carcass was still mostly intact and was possibly about four days old. I was very cautious not to disturb the area around the carcass, but



Early in December 2020 I received the dreaded message that a rhino carcass had been found. One of the landowners on a game drive had seen a large concentration of vultures, and upon investigation had found a dead rhino. I immediately drove to the scene and walked onto a scene of devastation. The hundreds of vultures were scattered about on every available perch in the vicinity looking like undertakers vying for business.

As I approached the grey mound the sickening smell of death made me gag and I moved upwind to avoid having to breathe in the decaying vapours. This once magnificent White Rhino bull was reduced to a pile of rotting flesh covered by its thick hide, giving it the distinction of being called a pachyderm ('thick-skinned'). The once proud

there had been some feeding by hyena and of course the vultures had also pecked all the very soft bits like the eyes, and the blow flies had laid hundreds of thousands of eggs with the resulting maggots writhing like some demented witches' rice party. The impact of being at a carcass of a rhino that has been poached, is like a sledgehammer to all your senses.

Apart from the impact, the horrific smell of death and even the sounds of the swarming flies all create a sense of disbelief and extreme loathing. The intense anger that one feels towards the poachers that have perpetrated such a terrible deed is frightening in itself. After doing a 360° search of the surrounding area for any clearly visible evidence, I set the wheels in motion to get

a professional forensic team out with the SAPS to do the necropsy (autopsy done on humans and necropsy done on animals).

The next day we descended on the rhino carcass again and the area was thoroughly searched; a metal detector was used to try and



to go and write up all the witness statements and complete the mountains of paperwork that go with each investigation.

While we were busy with this, the news came through that another White Rhino bull carcass had been found! That empty, hollow, sick feeling that comes over you when taking in the news is difficult to fully describe. You know that you need to kick things into urgent action; however, for a while you feel like you are trying to wade through thick treacle. This next carcass was on the opposite side of the reserve. We had to secure the area with an electric fence until the necropsy team could come back in two days' time, because they were fully booked up with having to attend to other carcasses on neighbouring reserves.

What a sick world we are living in when we have a dedicated team dealing with these crime scenes and this team cannot keep up with all the necropsies! By the way, this second carcass also revealed that the same calibre rifle had been used, and because the carcasses were not the same age, it is believed that it was the same poaching gang responsible.

The domino effect of these poaching incidents in terms of rearranging priorities is really frustrating. Instead of being able to carry out your normal management functions on the reserve, everything now has to take a back seat as you focus on the investigation of these poaching

locate any empty cartridge cases that might have been left after being ejected from the rifle. The necropsy team then systematically cut up the whole carcass to look for bullets that would show what calibre of rifle was used, and through ballistic testing might be linked to a particular rifle as evidence, if the poachers were ever caught with a weapon. The necropsy process is very gory and not for those that are at all squeamish. The team members are very good at systematically dissecting the whole carcass, making sure they do not miss anything.

It did not take long to find the entrance wound of the bullet and the angle of the trajectory. The stomach contents are all sifted through as well, and after meticulous searching two bullets were found. They were of a 375 H & H calibre, so this was empirical evidence of the rifle that was used. Once all the evidence and DNA had been bagged, and the crime scene thoroughly searched, we left



incidents. All the reserve staff that are in the vicinity of the carcasses have to take a polygraph to see if any deception is indicated. If someone fails a polygraph they have to then do another polygraph test with a separate, independent polygraph professional. If they fail a second time, then a full investigation is launched to determine the extent of their involvement in poaching.

This is an extremely focused, time-consuming process but must be done thoroughly, to build a case and prove their involvement. Many reserves now have deception policies in place, that will give

The saying, 'desperate times call for desperate measures' is one that springs to mind when one looks at how devastating this rhino poaching onslaught has been. How can one mitigate the threat and take away the temptation from the potential poacher to come into your protected area? If they are coming to get rhino horn, then it seems logical that if there are no rhinos with horns then they will avoid your reserve. After seeing many rhinos that are dead without their horns because of being killed by poachers, then the flipside would be why we cannot see rhinos



the Warden/GM the right to deny an individual access to their place of work within a protected area, if they have indicated strong deception from two independent polygraph experts. Having a good informer network in the communities also helps to get a clearer picture of what is happening with the poaching gangs, and ultimately the crime syndicates who coordinate these poaching activities.

that are alive and thriving, but without their horns. Rhino horn is made up of primarily keratin which is similar to the protein found in fingernails, hair and animal hooves. The rhino horn is actually a tuft of hair that is tightly compacted and glued together by exudates from the sebaceous glands on the nose of the rhino.

There is no evidence to suggest that a rhino horn has any medicinal or aphrodisiac value. It has



become a massive status symbol in the Far East, and the end-users will pay between USD30 000 to USD80 000 per kilogram, making it more lucrative than gold. This means that at every level in the poaching procurement chain, there are massive profits for all those who get involved.

This is why dehorning of rhinos has become such an important tool in the fight against poaching. Removing a rhino's horn does not hurt the animal, and best of all, it grows back again within 18 to 24 months. Therefore, once you start with a de-horning operation you have to repeat it every two years. Many advocates of the legal rhino horn trade believe that this is a sustainable way to provide rhino horn to a market, where there is an unusually high demand. Others will argue that this will only stimulate the trade and provide channels for illegal, poached rhino horn to also be disposed of.

Selati Game Reserve approached Nkombe Rhino, which is a South African non-profit organisation that focuses on the protection of endangered species. After explaining our dilemma and the urgency needed to do a blanket de-horning operation, they sprang into action and organised everything associated with such a massive undertaking within one month. Every facet of the operation needs to be planned in minute detail, and contingencies put in place when you receive curve balls.

Aerial support is of paramount importance and a fixed-wing Savannah light aircraft is used as a spotter plane to locate the rhinos. When suitable animals have been located, the fixed-wing pilot informs the helicopter pilot, who

then takes off with the reserve ecologist, and the wildlife veterinarian who will be darting the rhino to immobilise it. Ground-to-air radios are used to communicate with the ground crews which are split into two groups, each with its own veterinarian, vet support staff, ecological research staff, interns, donors, provincial government conservation permitting officials, an outsourced security company that removes the horns off site immediately to a secure location, and the counter-poaching team who provides the security for the entire operation.

When the call comes there is a dash to get to the area where the fixed-wing has spotted the animals and the helicopter waits until the ground crews are in the vicinity before the rhinos are darted. Once the rhino starts showing signs of the drug taking effect, the ground crew advance team runs in to cover the eyes with a purpose built blindfold, and they also ensure that the animal is lying on its brisket. The breathing is monitored constantly, and oxygen is administered for the entire time that the rhino is under sedation. Water is poured over the rhino and a blower used to keep the animal cool. The research team takes all the measurements and records all the relevant data. If there is an existing microchip, this is recorded, or a new microchip will be inserted if the scanner does not find one. All the rhinos on the Selati reserve have ear notches, which help us identify the animals in the field. If the rhino does not have notches, then these will be cut into the ears using the universal chart which gives it a unique number for future identification in the field.



Working in parallel, the vet will start the preparation to cut the anterior and posterior horns off. They take great care to avoid the growth plate, and then with white chalk mark the line where the cut will take place. A chainsaw is used to cut the horns off, and then the hard edges are also trimmed off so that the regrowth will be uniform. An angle grinder with a rough grinding disc is then used to shape both the horn bases and finally hoof oil is applied to seal the area. This is akin to a lady painting her nails with nail varnish. The whole process is painless for the rhino even while the chainsaw is cutting the horns off, just like human finger or toe nails being cut with a nail clipper.

The horns are then taken by the government representative and marked with a unique serial number. Every horn is also microchipped and DNA taken from each rhino. The paperwork is very onerous, and once the government representative from the provincial conservation authority is satisfied, the horns are handed to the security company for safekeeping and transport.

Once all the groundwork is done and the vet is satisfied, the equipment is re-packed and stowed on board the vehicles, together with all the people involved in the operation. Then only is the rhino given the reversal drug and woken up, none the worse for wear.

Having two ground teams means we can work simultaneously on two different animals. All the while the spotter plane is in the air, looking for the next animals to be done. All the rhinos that have already been dehorned have a large X marked on their backs, so for the next couple of days, the pilots can quickly see which animals have been done and which still need to be done. The whole process from when the animal is darted to when it is woken up after being dehorned is around 30 minutes, and most times even shorter.

These blanket dehorning operations could not happen if it was not for very generous donations solicited through Nkombe Rhino. Based on the latest statistics from the KNP, we all realise the importance of protecting all the Black and White Rhino populations, both on private and state land.





There are very few left! Every rhino is critically important and we cannot afford to have poachers decide the fate of the rhinos, which will determine whether they will live on or become extinct in the next ten years. Initiatives like the dehorning will help us to mitigate the poaching threat. Hopefully, one day we will all be able to enjoy rhinos with horns in the wild, knowing they are safe and can live in peace, growing to a ripe old age. 🌍

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