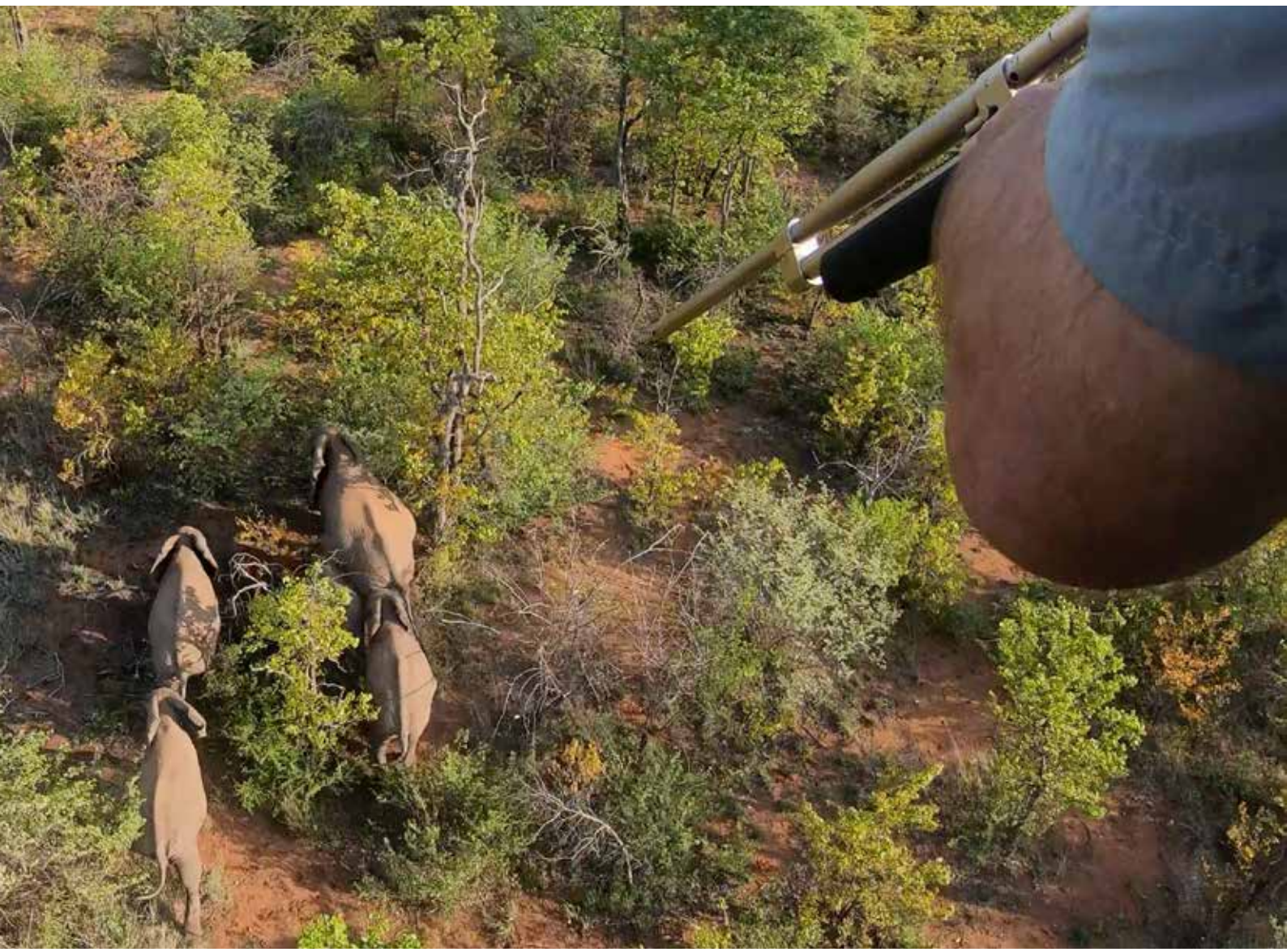
# VET nuus·news

Desember / December 2021

The Monthly Magazine of the SOUTH AFRICAN VETERINARY ASSOCIATION
Die Maandblad van die SUID-AFRIKAANSE VETERINÊRE VERENIGING



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*Cover: Dr Johan Marais*











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# Greetings Colleagues,



*Leon de Bruyn*

As we head towards the festive season, we hopefully won't have the fourth wave of the Covid-19 pandemic looming too large on the horizon. It would be refreshing to celebrate the birth of our Lord and Saviour, Jesus Christ and enjoy fellowship with friends and family without too many restrictions this year. I personally can't wait to lose the face masks in the hopefully not too distant future as the summer heat and humidity crank up.

November ended up with quite a few meetings with SAVA FinCo and ExCo Meetings and our Gala Awards Dinner with my Presidential farewell on Friday the 26th. The previous day was the DALRRD-NAHF liaison meeting with our SAVA Representative on the SAVC also having Council meetings on the 24th and 25th. At ExCo, we did discuss the situation at the SAVC and how to move forward with implementing the amended motion at our October SAVA AGM. As mentioned last month: We resolved to engage with the SAVC to form a Mediation Committee comprised of equal members of SAVA and the SAVC and other stakeholders.

The mediation committee will be guided by a professional mediator and investigate the circumstances around the resignations of the 5 SAVC Councilors during this term. We contacted the SAVC to set up a SAVA-SAVC ExCo meeting to discuss this resolution amongst other essential matters. It, however, quickly became clear that we were not going to fit in this meeting in the congested year-end calendar. We, therefore, plan to meet with the SAVC Executive in January 2022. I also attended our East Cape & Karoo SAVA Branch year-end committee meeting in November. We followed up on our Rabies Vaccination and Awareness Campaign and other pressing provincial matters.

The exciting news is that, with the Covid-19 Pandemic hopefully under control and a certain amount of webinar fatigue prevalent, we intend to host an in-person SAVA Biennial Congress in October 2022. Sessions will be recorded for those who can't attend in person.

Our VetNews theme for December is Wildlife. The Southern African Wildlife Industry and veterinary involvement therein has changed dramatically over the last few decades. The sustainable utilisation model practised by private game ranchers has attracted considerable criticism from animal rights activists and specific international conservation organisations over the years.

It is, however, no coincidence that South Africa and Namibia are the two countries where biodiversity has increased over the last century.

The legislated private ownership of wild animals has led to large areas of private land being set aside for breeding, utilisation and conservation of wildlife. The challenge with any booming industry is that greedy individuals can jump on the bandwagon.

Sometimes responsible and ethical management is sacrificed for financial gain. Veterinarians are often placed in a compromising position by demanding wildlife clients. It can quickly happen that vets are pressured to continue with a game capture operation when conditions become suboptimal.

It is crucial to remind the owners and managers that although it is a business, the welfare of the animals is paramount. When the breeding bubble burst, and the subsequent collapse of wildlife prices, owners may be forced to look for ways to reduce costs. Furthermore, people will often point fingers at the wildlife vet when things go wrong, as he is the professional involved in the operation.

Our involvement in the colour variant boom, intensive wildlife ranching, the lion breeding industry and the few colleagues implicated in rhino poaching has not always painted the veterinary



profession in the best light! It was made evident when disparaging remarks about vets in the wildlife industry were made in the High-Level Panel (HLP) report to the Environmental Minister.

The SAVA AEWC and Wildlife Group have worked hard to respond to this HLP report and correct some of the misguided perceptions expressed therein. Perceptions are important in forming public opinion and the social media realm, so we must strive to be perceived as an ethical profession that prioritises the health and welfare of animals and is committed to the genuine conservation of our wildlife.

Many colleagues are making a significant contribution to wildlife conservation and research in private practice, international, national and provincial conservation bodies, at the Faculty and other learning centres and zoological institutions. Enjoy the informative articles in this VetNews relating to Elephant Contraception, Sedatives and Tranquillisers in Wildlife and a groundbreaking CT scan at Onderstepoort. There are certainly some exciting developments afoot.

As the dominant species on this planet, we have dramatically altered the Earth in recent times. For those of us who believe our Lord has given us dominion over the plants and animals, it is essential to realise that with this great power comes tremendous responsibility. We have not always performed our custodianship role with great wisdom, as we have tended to excessively exploit natural resources and pollute the environment with the waste we then create. As our knowledge of the intricate web of creation increases, we realise how interdependent all life is. Thankfully many thought leaders recognise that we need to undergo a paradigm shift in managing our precious planet. As veterinarians, we are the custodians of animal health and play an integral role in animal welfare. Our approach to managing the world's wildlife populations and ecosystems will have far-reaching consequences for future generations. Let us hope we can collaborate wisely with other disciplines in the best interests of Creation.

I would like to wish you all a blessed Christmas and a wonderful festive season with your families, friends and other loved ones.

Be safe as we look forward to an exciting 2022.

Blessings,

Leon

## CREDO

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Suid-Afrikaanse Veterinêre Vereniging

**We, the members of the Association, resolve at all times:**

- To honour our profession and its Code of Ethics
- To maintain and uphold high professional and scientific standards
- To use our professional knowledge, skills and resources to protect and promote the health and welfare of animals and humans
- To further the status and image of the veterinarian and to foster and enrich veterinary science
- To promote the interests of our Association and fellowship amongst its members.

**Ons, die lede van die Vereniging, onderneem om te alle tye:**

- Ons professie in ere te hou en sy Etiese Gedragskode na te kom
- 'n Hoë professionele en wetenskaplike peil te handhaaf en te onderhou
- Ons professionele kennis, vaardigheid en hulpbronne aan te wend ter beskerming en bevordering van die gesondheid en welsyn van dier en mens
- Die status en beeld van die veearts te bevorder en die veeartsenykunde te verryk
- Die belange van ons Vereniging en die genootskap tussen sy lede te bevorder.



*Andriette van der Merwe*

# Editor's notes / Redakteurs notas

Die veld is die plek waar ek my eie siel kan vind, 'n plek waar ek naby aan my Skepper is en sy magtigheid kan aanvoel. Dit is die plek van vrede, rus en stilte.



Tot jy begin luister, dan lawaai dit goed. Ek hoop waar jy woon, jy ook die kans neem om in die veld te kom. Ek hoop ook dat die plekke wat baie droog was, goeie reën gekry het.

This month the spotlight falls on Wildlife, and I would like to credit Dr Katja Koepel and her team of the SAVA Wildlife Group for their hard work and dedication in collecting and writing sterling articles. It will make for excellent holiday reading. It is indeed a dumper edition

Kyk gerus uit in hierdie uitgawe vir die plakaat op p8. U kan dit gerus uitdruk en opsit in die kliniek. Daar gaan gepoog word om met elke uitgawe 'n toepaslike plakaat te skep vir die kliniek se wagkamer.

Something very unusual was the CT scanning of the head of a white rhino that was done at Onderstepoort recently.

The most comic photo was probably the team walking a blindfolded rhino to the Veterinary Academic Hospital and how Dr Steenkamp explained, holding his breath, that the head would fit into the machine.

With deep regret, we have to greet Dr Tanya Grantham. She will not be writing the rehabilitation column anymore. However, there is an exciting new column that will be introduced later.

To my rue, I neglected last month to place the author's name in the main article. Dr Catherine Machalaba, MPH, PhD, Senior Policy Advisor, Senior Scientist, EcoHealth Alliance, took time to write the very informative article on how The Veterinarians Positive impact can be expanded. EcoHealth Alliance develops science-based solutions to prevent pandemics and promote conservation. Also, to thank the One-Health team for their input.

My wens vir elke leser van die Vetnuus is dat jou Kerstyd baie geseënd sal wees en dat waar u ook al ry, dit veilig sal wees. Vir die wat tuisbly, dat dit ook goed sal wees. En die veeartse en hulle personeel wat steeds die kliënte bly dien. Wees seker hulle waardeer dit.
A blessed Christmas to all the readers, and may you experience peace, love, laughter, tranquillity, and a time you can relax and spend with loved ones.

Regards,

Andriette



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# Addo Elephant National Park Elephant Immunocontraception Programme

Historically elephants occurred throughout Africa, from the Mediterranean in the north, where they are reported to have been present during the Roman times, to the Cape Coast in the south, where they were documented (in 1447) by Vasco de Gama off present-day Mossel Bay. In the Western Cape, the local inhabitants, the San, led early European settlers into the interior where they encountered herds of elephant - along what is now known as the "Olifantsrivier" in the Cedarberg.

This area is still rich in San rock art depicting elephants - work by Paterson and Parkington concluded that early hunter/gatherers painted elephants because they have been "symbiotically, symbolically and spiritually linked to elephants, over tens of thousands of years in time and space" (Paterson 2007). There was a sense of balance/harmony, with elephants not been seen as a commodity by the San. An estimated 3000 elephants roamed the Cape Floristic Region in pre-colonial times.



With the settlers, the demand for ivory came – elephants were seen as a "valuable" commodity in Europe, and there was a perceived endless resource in Africa. This demand for ivory also encouraged expansion into the interior. Hunters, traders and settlers in the hinterland took their toll on the elephant populations.

By the late 1800s, in the Outeniqua/Tsitsikamma area, the remaining elephant had taken refuge in the Knysna Forests - their range decreased from a diversity of habitat types to only the afro-montane and surrounding fynbos - suboptimal habitat for elephants. A refuge population, which in turn leads to decreased fitness and gradually smaller populations. By the early 1900s, it was estimated that only 30-50 individuals remained.




In contrast to their neighbours in the Knysna Forests, the Addo elephant population, also persecuted for their tusks, took refuge in the Valley Bushveld Thickets of the Eastern Cape - which is optimal elephant habitat. In the early 1900s, developing agriculture led to further problems for the Addo elephant – with demands for the extermination of the population.

Luckily, sanity prevailed; the proclamation of Addo Elephant National Park (AENP) in 1931 protected the remaining eleven elephants. In 1954 a secure elephant-proof fence was erected, which has successfully protected and contained the elephants ever since - the population has grown from generation to generation.

Elephants are a keystone species capable of causing major ecosystem changes. When confined, natural processes such as migration and dispersion are no longer possible. For conservation managers, it is important to try to mimic these natural processes or to slow the population growth rates.

Fortunately, the park has been able to expand over the last two decades, giving them access to historical areas on which they used to range. Family groups of elephants have been relocated to the Nyathi and Darlington Dam sections of the park and, soon, they will be reintroduced to the Kabouga section of the park.

Unfortunately, even with this expansion and reintroductions, the population is still growing at an unsustainable rate for the size of the park. To slow the growth rate, immunocontraception was implemented in 2013.

Immunocontraception is a non-hormonal form of contraception that is a safe, effective way of reducing female fertility. It is based on the same principles of disease prevention through vaccination.



A non-cellular capsule known as the zona pellucida (ZP) surrounds all mammalian eggs. This capsule consists of several glycoproteins, some of which facilitate the attachment of the sperm to the egg during the process of fertilisation.

The immunocontraceptive vaccine is produced by harvesting the zona pellucida from the ovaries of pigs (Porcine zona pellucida or "PZP") which is purified and injected into the muscle of the target female animal, in this case, elephants.

The immune system detects the PZP as foreign material and is stimulated to produce antibodies against the proteins in the vaccine. These antibodies attach to the sperm receptors on the ZP of her eggs and prevent fertilisation.

The cow does not fall pregnant, and she will continue to show an oestrous cycle that is 15-17 weeks long.

Capture or immobilisation of cows is not required for vaccine administration as it can be done remotely utilising a dart that drops out soon after injection. At Addo, the vaccine administration is done from a helicopter over as short a time as possible to minimise disturbance to the population.

During administration, special 'marker darts' are used, which leave a dye mark on the animal; at the same time, it injects the vaccine, thereby enabling the darts man to distinguish between darted and undarted animals. Immunocontraceptive models have demonstrated that contraception of 75% of breeding-age females with an annual mortality rate of 2-3% is sufficient to achieve an annual population growth of 0%.

It is a humane method of elephant population control, which mimics natural episodic catastrophic processes, such as drought, because the treatment lengthens the cow's inter-calving intervals.

Alternative management strategies for protected areas is to create connectivity using corridors between the various areas under protection.



The connectivity of populations is also an important parameter for persistence. Well-connected subpopulations maintain themselves by colonising empty niches, exchanging genetic material, and adapting to changing environments.

In Knysna, the elephant population is no longer a population – only one female remains.

The Addo to Eden (Knysna) initiative gives us a glimmer of hope that in the future, maybe, we will rekindle our symbiotic, symbolic and spiritual link to elephants and have elephants moving across the landscape again – for future generations to see.

***By various authors: SAVA Animal Ethics and Welfare Committee***

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# I found a bird/animal What should I do?



**Is it in a LIFE THREATENING SITUATION?**

**Move it to safety**

**Is it INJURED?**

**Yes**

**Find a veterinarian or Permitted Rehabilitation Centre near you and take it there, or contact the Johannesburg Wildlife Vet**

**No**

**Is it a baby?**

**Yes**

**Leave it alone in a safe place. See if the parent returns to care for it. Do not pick it up If the parent does not show up or you are in doubt it will. Contact your local veterinarian, permitted Rehabilitation Centre or Johannesburg Veterinary Hospital**

**No**

**Leave it alone in a safe place or call your closest veterinarian, permitted rehabilitation centre or Johannesburg Wildlife Vet**



## Why should you not attempt to raise a baby wild animal or bird if you do not have experience?

- You may not have knowledge of the food it needs (NEVER feed Pronutro)
- Some birds/animals need specialised care to survive
- Some birds/animals have intricate social structures and need specialised release circumstances
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# Rabies in Wildlife

***By Katja Koeppel***

Rabies causes fatal encephalitis in all warm-blooded animals, including humans. It is thought to have entered southern Africa in 1892 with a domestic dog (*Canis lupus familiaris*) from England; however, rabies was most likely present in yellow mongoose (*Cynictis penicillata*) before that time in southern Africa (Swanepoel et al., 1993). Following the spread of disease in dogs, rabies emerged in cattle, back-backed jackal (*Canis mesomelas*) (Figure 1) and side-striped jackal (*Canis adustus*) in Namibia, Zimbabwe and northern part of Botswana and parts of Northwest, Limpopo and Mpumalanga provinces of South Africa. Rabies also occurs in a variety of other wildlife hosts in South Africa.



***Figure 1:***
***Black-backed jackal at the Cradle of humankind, Gauteng***

An analysis of rabies cases in all animals from 1993 to 2019 in South Africa using a spatiotemporal cluster analysis using a discrete Poisson space-time probability model on monthly aggregated cases identified a total of 11 701 cases to species level. Thirteen primary clusters ($p<0.05$) were identified, of which four were long term clusters lasting more than eight years, and seven were short term clusters lasting less than two years showing the different rabies epidemiology in various areas of South Africa. Domestic dogs accounted for 60% of all rabies cases. Wildlife was responsible for 15.8% of cases, with yellow mongoose the most frequently affected species, followed by bat-eared fox (*Otocyon megalotis*), black-backed jackal, meerkat (*Suricata suricatta*) and aardwolf (*Proteles cristatus*) (Koeppel et al., 2021). Bat-eared foxes and aardwolf predominated in western South Africa, and yellow mongoose in central South Africa, and jackals mostly predominated in north-western South Africa, in both the Gauteng and Northwest provinces.

Since 2016 rabies cases in animals have been decreasing from 528 annual cases to 264 cases in 2019. This decrease was achieved by vaccination high-risk dog populations, especially in Limpopo, Mpumalanga, KwaZulu-Natal, Eastern Cape and Free State provinces (Global Alliance for Rabies Control, 2021). With the emergence of Covid-19 in 2020, unfortunately, many rabies vaccinations could not take place. As a result, rabies in animals and humans is on the increase, with a total of 311 cases reported in 2020 and 265 cases reported until July 2021 (Figure 2). It can therefore be assumed that the cases from 2020 to 2021 will nearly double.

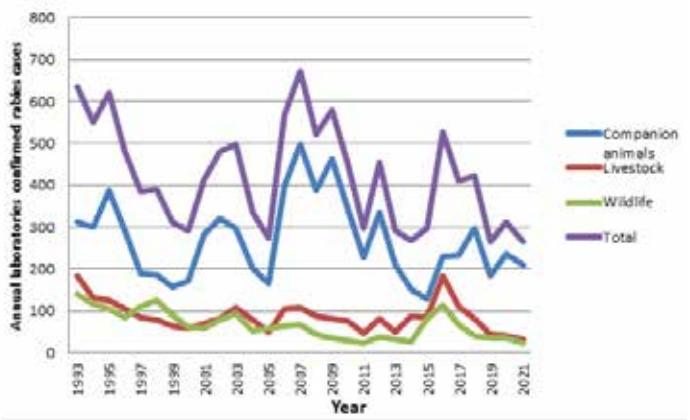



***Figure 2: Annual laboratories confirmed rabies cases in animals from January 1993 to July 2021.***

Rabies in animals are on the rise; there are more cases reported in both domestic and wild animals. Unusual animals have been reported such as wild spotted cats, also called black-footed cats (*Felis nigripes*) (Figure 3) and striped polecats (*Ictonyx straitus*) (Alwyn Krause, person-to-person account), with only 5 and 12 cases reported respectively since 1993. Wildlife usually presents either tame, shows loss of fear of humans or dogs or even heightened aggression as seen in a honey badger with rabies that attached people in Gauteng earlier this year (Geertsma P, personal



***Figure 3: Black-footed cat kitten showing fear response.***

>>> 10

communication). Jackals are often found dead near water such as dams or rivers during rabies outbreaks. Rabies in wildlife increases during the winter period when food is scarce, and animals travel over extensive areas in search thereof. Jackals also mate in June and July, causing changes in social structure and increased aggression in males. At the same time, rabies in companion animals such as dogs and cats and livestock is usually seen throughout the year.

Rabies can be controlled with 70% of dog population vaccinated, but this is easier said than done as there is a high turnover of dogs in rural areas (Conan et al., 2015). With ongoing vaccination campaigns needed to achieve adequate coverage. With the Covid-19 pandemic, these campaigns were suspended or delayed resulting in low rabies vaccination of dogs in high-risk areas. Fewer campaigns most likely resulted in the increase in rabies in both domestic animals and wildlife. Vaccination strategies should focus on high-risk dog populations to reduce the risk of rabies in domestic animals and humans.

Culling strategies have been used to control rabies in wildlife species such as yellow mongoose and black-backed jackals. Still, these are usually only effective in the short term. It creates a vacuum that results in the movement of more animals from adjacent areas and disrupts territories and social structures (Cross et al., 2007). The uncontrolled movement then results in a greater spread of rabies. The vaccination of high-risk wildlife populations or populations close to rabies outbreaks in domestic animals using oral bait rabies vaccines (Koeppel et al., 2020) can prevent the spread of rabies from domestic animals to wildlife as a jackal and vice versa.

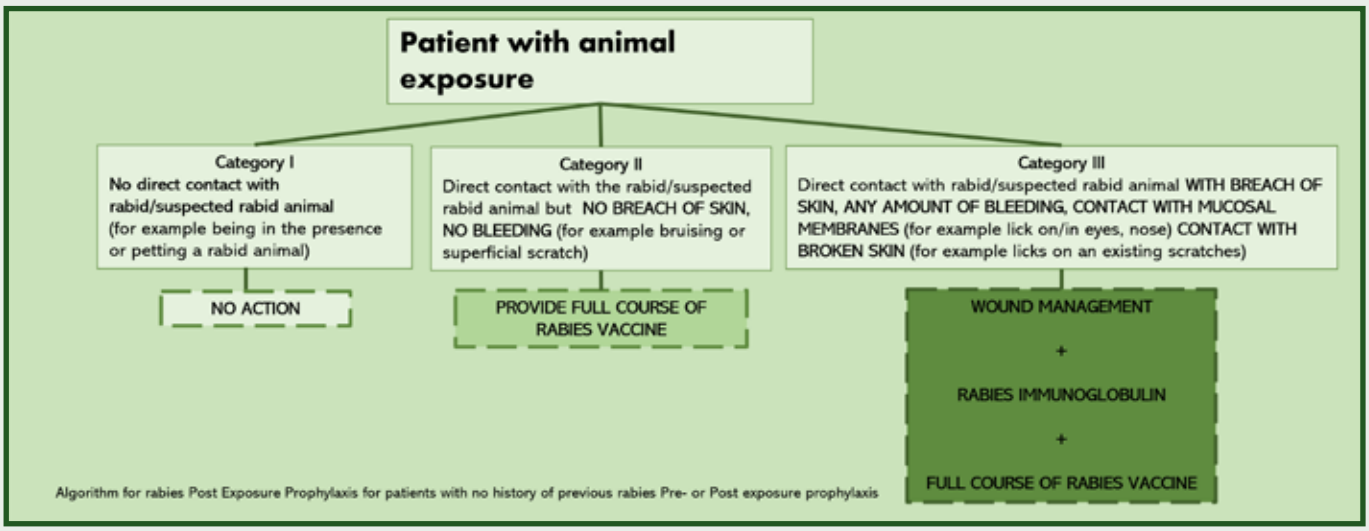



***Figure 4: Guidelines for treatment of rabies exposure in humans (NICD, 2020).***

Rabies is a fatal disease, and vaccination is the key to controlling it in animals. For humans, vaccinations are provided to high-risk persons such as veterinarians. If a human is exposed to a suspected rabid animal post-exposure, prophylaxis (PEP) should be provided with 24 hours. The use of correct human PEP will save lives (Figure 4). To ensure the correct PEP is provided and people seek medical attention, education of medical staff and people about the risks of rabies is crucial.

Rabies control remains a challenge in South Africa due to the long-term persistence of endemically infected areas with high dog densities and low vaccination coverage, the continuation of rabies in wildlife, and the potential of wildlife species to perpetuate outbreaks. The threat is exacerbated by changes in land use and farming practices and increases in human and dog populations. Control of rabies can be achieved through vaccination of high-risk dog populations. Oral vaccination of wildlife in high-risk areas can assist with the management of rabies in animals.

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# White rhino bull in the Computed Tomography at Onderstepoort, Faculty of Veterinary Science

*By Gerhard Steenkamp and Jacques O'Dell*

Dr Albertus Coetzee, a veterinarian for the Care for Wild rhino orphanage, contacted Prof. Steenkamp and Dr Jacques O'Dell for a 7-year-old white rhino. The rhino presented with a draining sinus on the left maxilla, just caudal to the rostral horn. At first, it was suspected that the horn's growth centre was damaged during the dehorning, which possibly caused an abscess that was draining below the horn.

Radiographs of the head were obtained but found not to be diagnostic. The draining sinus was then treated by flushing and several other conservative treatments, but unfortunately without success. Prof. Steenkamp suggested a computed tomography (CT) scan of the head be done to determine the origin of this lesion.



*Figure 1: White rhino bull with draining sinus below left eye (Photo: Jacques O'Dell).*

The CT scan was to take place at the University of Pretoria, Onderstepoort campus newly opened facility. In order to move the rhino to Onderstepoort, the necessary permits had to be obtained, which gave the team the time required to prepare for his arrival.

**Arrival and GA planning**

The rhino was immobilised and loaded by Dr Coetzee at the Care for Wild facility and transported under sedation to Onderstepoort. Upon arrival, the rhino was offloaded into the holding facilities. The following morning the rhino was darted by the responsible veterinarian in charge of the logistical operation and care of the rhino, Dr O'Dell.

Once the immobilising drugs took adequate effect, the rhino was blindfolded, walking ropes were secured, and the team walked the rhino to the hospital complex. Walking rhinos has become common practice to move these large animals over short distances.

Once the rhino reached the designated area, walking was halted, and general anaesthetics were administered. Prof. Gareth Zeiler was responsible for the anaesthesia during the CT scan and tooth extraction. Once the rhino was recumbent, a chain hoist manipulated the 1.2-ton rhino onto the CT trolley.



*Figure 2: White rhino bull been walked under sedation to the Onderstepoort Veterinary Academic hospital (Photo: Jacques O'Dell).*

The rhino was positioned in dorsal recumbency on the specially designed CT trolley to have a maximum neck extension. While the trolley was moved into the CT room, the team was faced with the following two challenges: does the head actually fit the diameter of the CT machine and can the CT machine extend far enough to scan the area of concern. Skilfully all the staff helped to manoeuvre the rhino into place and thankfully, with millimetres to spare, the rhino's head fitted and the gantry moved beyond the area of interest. The CT scan itself was uneventful and it was rather satisfying when we started to see the images generated and the lesion.

Being the worlds' first rhino head CT, the images were brilliant and a whole new world opened for the veterinary dentistry. Immediately it was evident that the rhino still had caps (persistent deciduous teeth) covering the maxillary premolar teeth. It became apparent that this was also the source of the draining tract (3rd maxillary premolar tooth). According to the literature, rhinos should have lost all their deciduous dentition before the age of 6-years-old. As this rhino was nearly 7-years-old, this was abnormal.

With the help of Dr. Coetzee and the assistance of Sr. Michelle Cruywagen, we set about removing the offending teeth. Although the caps were very obvious on CT, it was really difficult distinguishing the caps from the permanent teeth. Additionally, the caps were still well embedded into the alveolus. Therefore, it was difficult to identify a defect and to distinguish what was deciduous and what was permanent. Only using the CT images and great skills, Dr. Coetzee and Prof. Steenkamp were able to identify the

cap and visualise the permanent tooth. Horse dentistry equipment was used initially, but these tools were unfortunately not sufficient enough to deal with the size of these teeth. Therefore, the decision was made to use some of the chisels that had specifically made for Prof. Steenkamp's elephant work. After identification of the deciduous cap, the cap was then sectioned and removed using forceps.

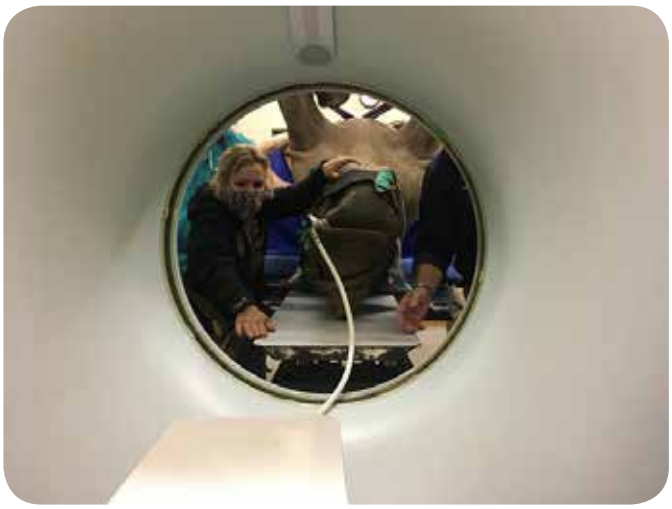


*Figure 3: White rhino bull being moved into computed tomography machine.*

Once all the tooth fragments were removed, the sinus was flushed. Flushing of the mouth and the area around the 3rd premolar was performed. With all the debris gone, we could confirm once more that the cap covering the permanent tooth was the initial problem.




*Figure 4: Cross sectional view of CT of rhino bull showing facial swelling and abscess on left side of face (arrows). Cap is visible overlaying the permanent molar (circle).*




*Figure 5: Lateral CT of rhino bull showing cap of over third premolar (circle)*

It is believed the cap resulted in food entrapment, leading to periodontitis around the tooth and ultimately creating a draining tract through the sinus and skin.

**Recovery and loading**

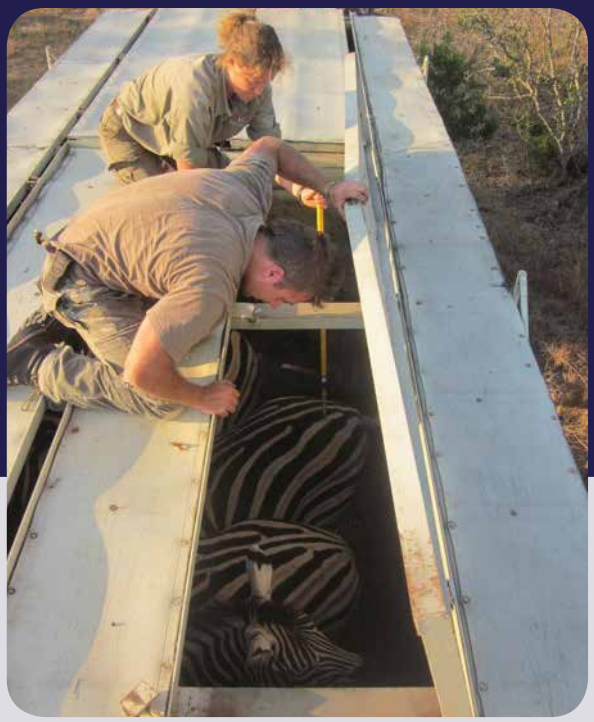
Throughout the procedure the rhino was kept immobilised with a combination of short acting and reversible anaesthetic drugs. This was to ensure rapid recovery upon completion of the procedure.

Once the procedure was completed the rhino was transferred to a different trolley and pushed towards the transport crate. With man power – and the help of lots of students – the rhino was pulled into the transport crate. Reversal drugs were administered and the rhino made an uneventful recovery. Three weeks after the procedure it has been reported that the rhino is clearly improving. The swelling on the left side of the face has gone down, the sinus is clearing and the rhino is eating well.

We would like to thank you to everyone involved in this mood-lifting case. If we were to count the people involved in making this happen, we are sure it will exceed 40. This proves an important point – veterinary science is a team sport!

It is so ironic that those case where we did not foresee any media attention, sometimes the opposite does happen. We are very fortunate to have a CT scanner, a very good radiology department and facilities to cope with even large animals like a rhino. This exact same process we would have followed for all other species where more information was needed in order to start the right treatment.

This shows again that there is nothing limiting us to performing the same diagnostics and treatments for some of the larger animals that we deal with on a daily basis.



# SEDATIVES AND TRANQUILISERS USED IN WILDLIFE ANIMALS: A SHORT SUMMARY

***By: Dr Liesel Laubscher***
***Wildlife Pharmaceuticals (Pty) Ltd***

Medicines used to capture and translocate wildlife can essentially be divided into three broad categories: 1) those used for restraint; 2) those used to reduce stress; and 3) those used to reverse or reduce medicine effects. Although the terms are often used interchangeably, medicines used to reduce stress in animals are classified as sedatives and tranquilisers (also called neuroleptics). A distinction is made between the two groups in terms of the effect of the dose administered. Increasing doses of sedatives will increase the effect to the point where the animal appears immobilised. Higher than recommended doses of tranquilisers, on the other hand, will have no apparent increase in effect and will only induce unwanted side effects. Tranquillisers suppress spontaneous movements while sparing spinal reflexes and unconditioned pain reflexes and generally have no antidotes. Medicines used in wildlife animals that fall within the definition of a tranquiliser include phenothiazine derivatives, butyrophenones and thioxanthenes. Sedatives cause CNS depression, and their effects can be reversed by administering available antidotes. Sedatives include the alpha$_2$-agonists and benzodiazepines.

**TRANQUILISERS**

**Phenothiazines**, the largest of the main classes of tranquilisers, are potent receptor blockers that give rise to many pharmacological responses. Responses are either due to their effects on central neurotransmission or their influence on neuronal terminal junctions in peripheral tissue. Their effects include calming and mood-alteration, anti-emesis (specifically in predators and primates) and good muscle relaxation.

**Acepromazine** is the most widely used phenothiazine and is considered short-acting. It is a competitive antagonist at dopamine and acetylcholine receptors, producing smooth inductions and recoveries. It may cause hypotension with reflex tachycardia, interfere with thermoregulation, block ovulation, and cause penile prolapse in zebras and rhinos. It is best used in combination with opioids for complete immobilisation.

**Perphenazine**, another phenothiazine, has been in clinical use for decades and is especially useful in providing longer duration tranquillisation. The enanthate and water-based formulations have been used in wildlife, with effects reportedly lasting for up to 7 days. It has been used in various antelope, equids, and rhino to successfully reduce trauma-related injuries in bomas, assist with adaptation of recently captured animals, calm animals during transport and control aggressive or dominant animals. Care should be taken to avoid overdosing as this may result in allotriophagia, torticollis, anorexia, tremors, head swaying, and catatonia. These side effects can be treated symptomatically with diazepam.



**Zuclopenthixol acetate** is a thioxanthene derivative that has been used in numerous wildlife animals as a long-acting tranquilliser. The thioxanthenes are related to phenothiazine and zuclopenthixol and can be used alone or as part of combinations to bridge the effects of shorter or longer-acting neuroleptics. The onset of action is usually seen within one hour and can last for up to 3–4 days. Although extrapyramidal symptoms occur at high doses, zuclopenthixol has a more significant margin of safety and a much better side effect profile than phenothiazines.

The last but most popular group of tranquilisers used in wildlife medicine are the **butyrophenones**. Azaperone was initially developed to reduce aggression in farmed pigs. Still, its vasodilatory effect, in addition to its tranquillising effect, was later found to be immensely beneficial in mitigating opioid-induced hypertension in wildlife, specifically in larger animals, e.g., elephants prone to developing pulmonary hypertension and pulmonary oedema. This effect is due to the antagonism of alpha$_1$-receptors in the periphery. With its short duration of action (up to 3-4 hours), azaperone can be safely used in most wildlife species, either on its own for short-term tranquillisation or in combination with opioids or alpha$_2$-agonists in immobilising mixtures. It has a wide margin of safety but should be avoided when semen collection is required as it does inhibit ejaculation.

Haloperidol is another popular butyrophenone used in wildlife medicine. While it exerts similar effects to azaperone, it is longer acting (reports of up to 18 hours in certain species) and is not compatible with opioids in a dart mixture. It is most effective when used on its own for intermediate

duration tranquillisation, with the onset of action usually seen within 10 minutes after IM injection. Extrapyramidal symptoms are commonly noted with high doses of haloperidol, and there have been reports of haloperidol causing aggression in species like kudu, blesbok and red hartebeest.

**SEDATIVES**

The two classes of sedatives predominantly used in wildlife medicine are alpha$_2$-agonists and benzodiazepines. Alpha$_2$-agonists act on alpha$_2$-adrenoreceptors in the CNS, cardiovascular, respiratory, renal, endocrine, gastrointestinal and hematologic systems. Effects on the CNS include sedation, a reduced stress response, muscle relaxation and analgesia. They also cause pronounced cardiorespiratory effects – administration may result in transient vasoconstriction followed by vasodilation and hypotension and a decreasing responsiveness of the respiratory system to $CO_2$. These effects may be compounded when used in combination with opioids. Other side effects include diuresis, vomiting (especially in carnivores) and diarrhoea and bloat in ruminants.

The four main **alpha$_2$-agonists** used in wildlife in order of potency and selectivity for the alpha$_2$-receptors are dexmedetomidine > medetomidine > detomidine > xylazine. Medetomidine is a racemic mixture of dexmedetomidine (the active enantiomer) and levomedetomidine, i.e., both medetomidine and dexmedetomidine exert the same clinical effects.

However, dexmedetomidine is generally used at half the dose of medetomidine. They are the most potent alpha$_2$'s used in wildlife medicine and work synergistically with opioids and dissociative anaesthetics in immobilising mixtures.

Xylazine is the least potent of the alpha$_2$'s used in wildlife medicine. While its effect can last for 1-2 hours, it only provides adequate analgesia for up to 30 minutes. As with medetomidine, it is commonly used with opioids and dissociative anaesthetics but is ineffective in excited or stressed animals since adrenaline binds to the same receptors and cannot be displaced by xylazine. In many wildlife species, anecdotal evidence suggests that medetomidine is more effective at displacing adrenaline at these receptors.

Detomidine has been widely used in wildlife species and is particularly useful in equids, especially zebra. While it is longer acting than xylazine, respiratory depression is a common side effect.

One of the critical advantages of sedatives is their reversibility, and alpha$_2$'s are no exception. Yohimbine and atipamezole, both alpha$_2$-antagonists, can be used. While yohimbine is far less specific than atipamezole, it reverses xylazine in carnivores and equid. The reversal is less accurate in ruminants, where re-sedation often occurs. Atipamezole is an extremely specific alpha$_2$-antagonist and can effectively reverse the effects of all available alpha$_2$-agonists.

Neither antagonists should be administered IV because of the risk of rapid and severe cardiovascular changes.

However, some have reported successful reversal of sedation without complication by administering half the dose IV and half the dose IM. The half-life of atipamezole is reportedly shorter than medetomidine; therefore, IV administration or administration soon after initial sedation with medetomidine is not advisable.

**Benzodiazepines** have been widely used in wildlife medicine. The effect of this class of sedatives is largely central in origin and stems from their affinity for gamma-aminobutyric acid (GABA) receptors in the brain and spinal cord. GABA is the primary physiological inhibitory neurotransmitter in the CNS, and benzodiazepines enhance the GABA-receptors' affinity for endogenous GABA.

In doing so, they cause sedation, anxiolysis, muscle relaxation and anticonvulsant effects. Benzodiazepines also have amnesic effects, and their reversal has become possible with the introduction of flumazenil.

The most used benzodiazepines in wildlife medicine are diazepam and midazolam. Diazepam is incompatible with most other medicines in an aqueous solution and should be administered on its own. It is a good muscle relaxant and anticonvulsant and has an appetite-stimulating effect in some species. In ostriches, it produces excellent sedation.

Diazepam can also be used to control extrapyramidal side effects. Midazolam is more potent than diazepam and is better tolerated when administered IM. It has better anticonvulsant, anxiolytic and amnesic effects and can be safely co-administered with opioids, alpha$_2$'s and dissociative anaesthetics. Midazolam is also highly effective when administered orally to carnivores, usually in meat.

The field of veterinary psychopharmacology is fast-expanding, and with it, the availability of medicines to reduce stress and anxiety in animals. Although an abundance of sedatives and tranquilisers are already available, there are still groups of medicines that remain unexplored.

Hopefully, more medicines will become available in appropriately concentrated formulations that will enable the safe and humane handling and treatment of wildlife animals.



For more information on recommended dosing for any sedatives and tranquilisers discussed, feel free to contact Dr Liesel Laubscher from Wildlife Pharmaceuticals (Pty) Ltd at:
specialist@wildpharm.co.za
Or send an enquiry via the website at:
www.wildpharm.co.za.
Dr Cobus Raath also presented a free webinar on the topic, and the recording can be accessed via the Wildlife Pharmaceuticals website.

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# Transfrontier Conservation Areas – Geography, Wildlife and People

*By Richard Burroughs*

South Africa is blessed with some remarkable wildlife areas appreciated and utilised by the general tourism public in South Africa, with significant conservation and economic development potential. So too do many of our neighbouring countries, but with far fewer economic or conservation development and growth opportunities. As part of the process to encourage peace and economic prosperity across the region, the concept of transfrontier conservation areas or Peace Parks was developed by Pres. Nelson Mandela, Dr Anton Rupert and Prince Bernhard of the Netherlands. At the end of a tumultuous period in our history, this was seen as a way of development, and communication between neighbouring countries, culminating in the presidency of Nelson Mandela. The Peace Parks Foundation was established as a consultative and empowering body, with decision-making entrenched into the various legal processes of individual countries.

The establishment has been formalised by the Southern African Development Community (SADC) Protocol on Wildlife, Conservation and Law Enforcement. A Trans-Frontier Conservation Area (TFCA) is defined as *an area or component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas, as well as multiple resource use areas in which the participating countries decided to co-operate in managing shared natural resources.*




***Figure 1: Nelson Mandela interacting with wildlife***

In the words of Nelson Mandela:

*'I know of no political movement, no philosophy, and no ideology which does not agree with the peace parks concept as we see it going into fruition today. It is a concept that all can embrace. In a world beset by conflict and division, peace is one of the cornerstones of the future. Peace Parks are building blocks in this process, not only in our region but potentially the entire world.'*

The creation of TFCA's was clearly a visionary undertaking and one of mammoth proportions. Some of these have been relatively easy to achieve; others are more complicated. The vision currently envisages a combination of different land uses, including wildlife, cattle farming, conventional agriculture, various diseases, disease control policies, other legal frameworks for trade, security and border control, all within an area without fences. A critical component of the different land uses is acknowledging the rights and needs of current local communities, both within the TFCA and on its borders. Within this concept, the role of transboundary disease management has become critically important, particularly with its potential impact of incorporating areas of lower biosecurity into existing areas that have strong disease control policies—particularly concerning international trade. Broadly speaking, the primary diseases of trade importance are associated with hoofed stock and include foot-and-mouth disease (FMD), brucellosis, tuberculosis, theileriosis anthrax and Rift Valley fever. Rabies plays a significant role, primarily in carnivores, although spill-over into other hosts is undoubtedly possible.




***Figure 2: Map of Africa showing current and proposed Transfrontier Conservation Areas in red.***

In short, the countries involved in establishing a TFCA enter into discussions. Once the areas of interest are identified, an MOU (memorandum of understanding) is signed. Then once the various policy and legal frameworks and requirements have been decided on and possibly adapted, a Memorandum of Understanding is signed. After extensive deliberation, a Treaty is signed between relevant ministers of the various countries involved, declaring a formal Transfrontier Park. On South Africa's borders, this currently includes the Ai/Ais-Richtersveld TFP, Kalagadi TFP, Greater Limpopo TFP. Others that are in the establishment process are the Mapungubwe TFCA, Maloti-Drakensberg TFCA and Lubombo TFCA. (See Figure 2). Of the diseases mentioned above, FMD is clearly the most critical, and the status of a country is often a deal-breaker. South Africa, Botswana and Namibia have rigorous FMD control strategies, Zimbabwe and Mocambique less so. Negotiations often stall, depending on the presence of buffalo and general movement control of susceptible species in the adjoining countries. We are all aware of the zones of FMD control in South Africa - summarised in the Map of the Dept of Agriculture. South Africa is considered by the OIE (most of the time!) to be an FMD-free country, without vaccination, with an infected zone and protection zone. We have a small area in the protection zone, adjacent to




***Figure 3: Foot and Mouth Disease zones around the Kruger National Park.***

>>> 18

the infected zone where vaccination is practised, but not in the free zone. Outbreaks can have a significant effect on our FMD-free status, as Figure 3 indicates.

**Greater Limpopo Transfrontier Park.**

This Park was established in 2002 and included the Kruger National Park, the Limpopo National Park in Mozambique and the Gonarezhou National Park in Zimbabwe. (See Figure 2). During 2015-2018, Banhine NP and Zinave NP have given better management and support in Mozambique. The reserves west of Kruger NP are included in this TFP due to their joint management agreements with KNP. The hatched area indicates the planning- or potential area of this TFCA in Figure 4.

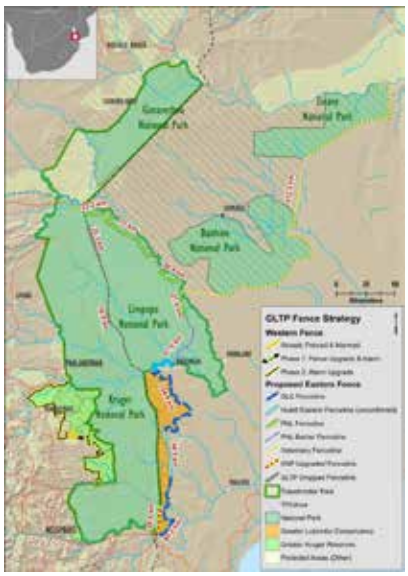



***Figure 4: Map of the Greater Limpopo TFP and TFCA's.***

Gonarezhou National Park in Zimbabwe is some distance away from the border with the South African and Mozambique Parks, with communal land and livestock in that area.

The GLTFP was proclaimed, fences were dropped in places, and elephants and other animals were introduced into the Mocambique side. There are still communities and livestock in that area, with resistance by some of these communities to being moved. The reluctance has been one of the biggest challenges to this TFCA – both from the Mozambican and Zimbabwe side. The challenge will stay an ongoing concern unless these communities' traditional association with cattle is fully considered.

From a disease point of view, there are some considerations, and most have to do with the role of buffalo associated with FMD, TB, corridor disease and brucellosis. The FMD control issues are not of concern, as no livestock may enter into or west of the KNP area, as they would be considered FMD infected, as is Kruger. Tuberculosis, brucellosis, and corridor disease occur in KNP. TB, in particular, has spread to southern Zimbabwe from buffalo crossing the Limpopo into Zimbabwe, which has caused anxiety in government veterinary services there. TB, brucellosis and theileriosis has become more common in Mozambique as well. Rift Valley fever plays an episodic role in these areas. From an economic point of view, the establishment of the TFCA has had mixed results. The development of tourism destinations in Limpopo NP and Gonarezhou NP and associated areas had mixed results. Access to them for tourists has been difficult, and supply logistics in Mozambique and Zimbabwe is expensive. Establishing the Giriyondo border post as a tourism-only border post has meant that supply to lodges from South Africa through the KNP has not been possible. On the South African side, fences still exist and play a significant role in preventing domestic livestock from going into wildlife or high-disease risk areas; and preventing high disease risk animals such as infected buffalo from coming into contact with domestic animals. Fences also play a significant role in mitigating human-wildlife conflict, although this is by no means a guarantee.

**Kgalagadi**
TRANSFRONTIER PARK

Because of perceived security and biosecurity considerations outside Gonarezhou, a much desired and discussed tourist-only border crossing of the Limpopo from the North of the Kruger NP into southern Gonarezhou remains unresolved. This arid landscape Kgalagadi Transfrontier Park is situated between South Africa and Botswana. Although proclaimed in 2000, it has been in existence de facto since 1948 through a



***Figure 5: Gonarezhou National Park, Zimbabwe (Copyright Michael D. Kock)***

verbal agreement and is probably Africa's oldest Transfrontier Park. It consists of the old Kalahari Gemsbok National Park in South Africa, the Gemsbok National Park and Mabuasehube Game Reserve in Botswana (Figure 6). San communities were incorporated into specific areas to the south of the park in 2002.

The development of this TFCA had been relatively easy, and joint management of the whole park was undertaken by both Botswana and South Africa. Tourism opportunities existed, and tourists could move from one country to the other without border restrictions. A 2-night stay in a camp in the National Park is, however, a pre-requisite.

As with most of the Northern Cape, Southern Botswana and southern Namibia, this is a relatively dry area, and there are no significant diseases of concern. All three countries have similar FMD control strategies, and this area is recognised as FMD-free. Anthrax is an occasional issue, and rabies in carnivores does occur. An outbreak of distemper in the lions in the KTFP has been described, probably associated with vagrant domestic dogs in the area. Although no Namibian land forms part of the Kgalagadi Transfrontier Park, Namibia is an active partner and manages one of the exit camps.

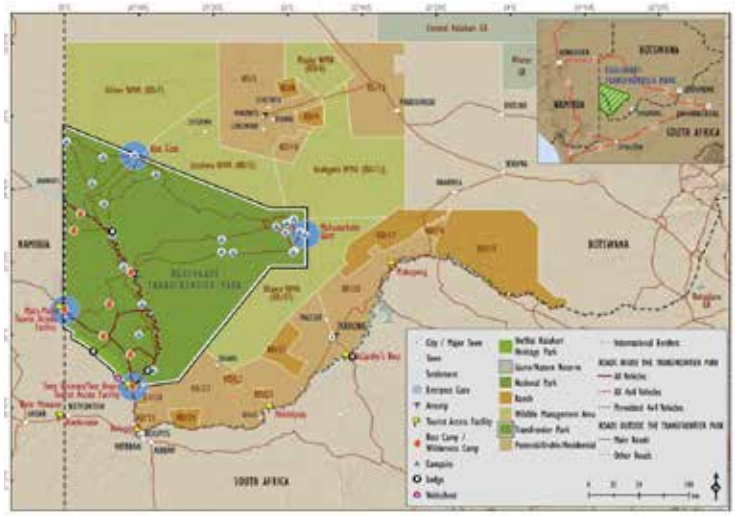



***Figure 6: Kgalagadi Transfrontier Park.***

**Greater Mapungubwe Transfrontier Conservation Area (GMTFCA)**

Located at the confluence of the Limpopo and Shashi Rivers, GMTFCA is shared between 3 countries – South Africa, Botswana and Zimbabwe. It is again an arid landscape and has a significant cultural history, and Mapungubwe has been designated a World Heritage Site by UNESCO. Core to this is the Mapungubwe National Park in South Africa, is the Northern

Tuli Game Reserve (NOTUGRE) in Botswana, the Tuli Circle Safari Area in Zimbabwe, communal land and private ranches. (See Figure 7).

It has dramatic landscapes and abundant wildlife. However, in the authors' opinion, it is one of the most challenging TFCA projects envisaged. An MoU was signed in 2006 to establish the TFCA, but progress has been slow, primarily because of the complexities of the inputs required from role players in all three countries.

From a wildlife disease perspective, the most common denominator is buffalo (or lack of them) and the role of FMD control. Botswana and South Africa (most of the time!) strive for and achieve OIE freedom from FMD; Zimbabwe does not. There have been very few diseases that have been recorded in this area, but episodic outbreaks of rabies can be expected.




***Figure 7: Greater Mapungubwe TFCA***

On the South African side, the Mapungubwe National Park is not a unified block of land and has private landowners in its midst. Most of Mapungubwe falls within the FMD Protection Zone along the Limpopo River on the Zimbabwe border as far as the confluence of the Shashi river – i.e. until the beginning of the Botswana border (Figure 8).

The southern boundary is formed by the tar road R572 and part of the R521 that connects Musina and Pont Drift. This zone is currently managed as a buffalo-free area because of the risks that infected buffalo may pose to the FMD free zone to the south.

No FMD vaccination takes place here. The border fence between South Africa and Zimbabwe needs repair and is a simple cattle fence. There is also daily movement of workers on foot that cross the Limpopo from Zimbabwe to the tomato farms on the South African side. A coal mine that has been established on the border of the proposed TFCA.

The NOTUGRE area is a privately owned reserve in Botswana, with individual landowners primarily running high-end ecotourism operations. There is no fence between the NOTUGRE and the Tuli Safari Are in Botswana, and the fences between NOTUGRE and Mapungubwe have been taken down.

There is thus free elephant and other wildlife movements into Mapungubwe. Botswana views this as a buffalo-free area, and buffalo and domestic cattle that stray into this area from Zimbabwe are immediately removed. No FMD vaccination takes place here. However, this area is not open to regular tourists unless they go to a specific private lodge.

In Zimbabwe, livestock movement controls are inefficient, and control zones that existed no longer do so. There are reliable reports of cattle that are carriers of FMD, which makes the herds in the communal lands such as the Maramani and Machuchuta areas potentially at risk, neither of which Botswana nor South Africa wish to be exposed to.

Vaccination of cattle in the face of an FMD outbreak is standard practice in Zimbabwe. One private landowner had a herd of buffalo that he was obliged to sell to be part of this TFCA if the fences between the countries were to come down. However, these communal areas in Zimbabwe are in most need of the benefit a TFCA would provide them concerning economic upliftment.

There are wildlife areas that would wish to be associated with an increased footprint of the TFCA, especially on the SA side. To do so would require re-defining and moving SA's protection zone to the south of the R572 and part of the R521 tar road to potentially include areas such as Venetia. There are, however, specific pathogen-free buffalo farmers to the south of this that may have legal objections to this.

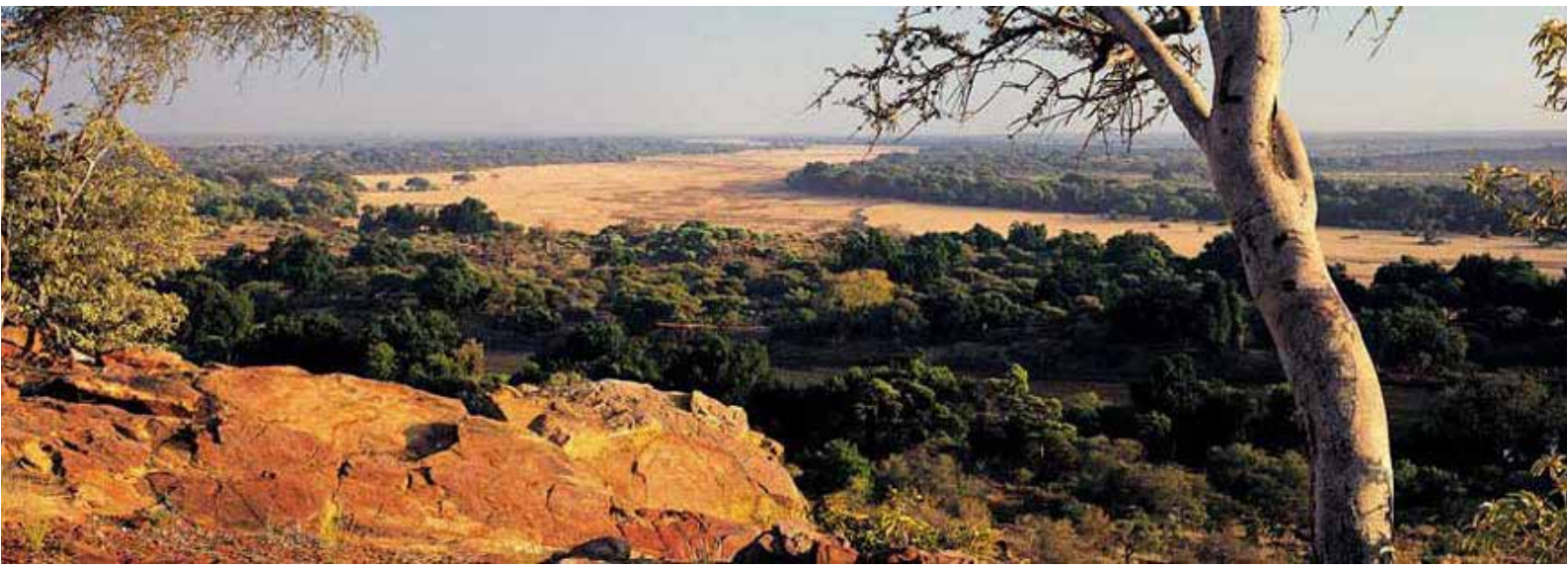
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**VETERINARY PROCEDURAL NOTICE FOR FOOT AND MOUTH DISEASE CONTROL IN SOUTH AFRICA**

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***Figure 8:The confluence of the Limpopo and Shashi rivers***



SAVA Community Veterinary Clinics

**An initiative of the SOUTH AFRICAN VETERINARY ASSOCIATION**

**Non-profit Company: 1998/016654/08**
**Non-profit Organisation: 000-234 NPO**
**Public Benefit Organisation: 130001321**

# Scheinberg COVID Fund Grant Progress

**In June 2021, the Scheinberg COVID Relief Fund allocated funds to SAVA-CVC for vaccinations, sterilizations, and AWA bursaries and funds for practical work.**

**To date, 1725 Vaccines have been distributed, 82 sterilizations done, and 34 AWA students received practical training. Applications for the 2022 Animal Welfare Assistant course at UNISA have closed, but application results are not yet available, therefore we cannot accept bursary applications yet.**

**Claudia Cloete: SAVA-CVC Manager**



*22 September 2021 – Caeser Jantjies visiting Atlantis CVC for his 3rd vaccination and rabies.*



*23 September 2021 – Johnnaline Hendriks with Spotty for his first vaccine and rabies.*



*23 September 2021 – Mohamed with Storm for his 3rd vaccination and rabies.*

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*23 September 2021 -Hanelee Lee with Bailey for this 3rd vaccination and rabies.*



*Dr Jennifer Deverson (middle) with AWA students, Auberi Courchay (left) and Kara Wannenburg (right). The photo was taken on 19 September 2021 in Darling, on the West Coast of South Africa.*

EduCVC

# Bank details:

SAVA Community Veterinary Clinics

**Organization name:**
**EduCVC**
**Company**
**Registration No:**
**2019/570769/08**
**FNB Bank Cheque**
**Account:**
**6283 6622 531**
**Branch: Brooklyn:**
**251345**
**SWIFT Code:**
**FIRNZAJJ**

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**All donations qualify for an 18A Tax certificate which means your donation is tax deductible!**

**Please contact us**
**cvcmanager@sava.co.za**
**for details.**

**Organization name:**
**SAVA-CVC**
**Company**
**Registration No:**
**1998/016654/08**
**ABSA Bank**
**Cheque Account:**
**4056779023**
**Branch: Brooklyn**
**(632005)**
**Swift Code:**
**ABSA ZAJJ**

# SAVA: Debit Orders

The debit order system that the association implemented in 2019, was and is still a huge success. We have therefore decided to offer our members the option to choose the debit order option again, should they wish. The debit order will be over a period of 10 months (February 2022 – November 2022) or divided over a shorter period in the event of members renewing or joining SAVA later during the year.

A new debit order mandate has to be completed by SAVA members each year. Members who made use of the debit orders in 2021, are therefore required to complete a new mandate and email back to: bookkeeper@sava.co.za not later than Friday 21 January 2022.

The 2022 mandate is available on the SAVA Website. A link to the mandate will also be provided with the 2022 membership invoices that will be emailed to our members /beginning January 2022.

SAVA Community Veterinary Clinics

Having been kept abreast of the developments of SAVA-CVC, you are in no doubt aware that we have revitalised this critical organisation. The nature of charity organisations is that there is constant uncertainty about future cash flow – every donation from a particular individual or group might be the last donation.

Securing enough guaranteed cash flow to cover operating costs in SAVA-CVC is something that we have actively pursued over the last couple of years. We have reported on the significant activities that have been performed in communities using funds from the generous donors.

SAVA would like to provide an easy method for our members to contribute to this worthy cause with an option to add a contribution to SAVA-CVC of R40.00 per month on your debit order.

The South African Veterinary Foundation (SAVF) aims to promote and advance veterinary and other biological sciences. This includes supporting veterinary research at all levels, to fund bursaries for veterinary studies and to invest and administer various financial portfolios in order to promote the knowledge, image and status of the veterinary and para-veterinary professions and practice within Southern Africa, resulting in improved quality of life for animal and man. An example of an activity that the SAVF is involved in: The SAVF funds research projects that will benefit the health of animals and is not detrimental to animals. For this purpose, the SAVF will only consider funding a project that has been approved by a recognised institution's Ethics and Research Committee.

Furthermore, the trustees of the SAVF also evaluate each study based on relevance, scientific soundness and humane treatment. Once a study is completed, the results of the research project are published in the Journal of the South African Veterinary Association or an international peer-reviewed journal on the ISI list of journals, as well as presented at a South African Veterinary Association congress or other appropriate SA congress. Finding funds for research is often not part of an academic or aspiring academic's nature. The SAVF wants to increase its reach by having more funds available to invest in research.

SAVA would like to provide an easy method for our members to contribute to this worthy cause with an option to add a contribution to the SAVF of R40.00 per month on your debit order.

Those who will continue to pay their SAVA membership fees on an annual basis, are also encouraged to add a donation to either or both of the SAVA-CVC and SAVF to their annual payment.

**Please communicate this donation through to bookkeeper@sava.co.za to enable SAVA to allocate your donation accordingly.**

# SAVA 2022

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**Dear SAVA member**

**Please note that Vethouse will close on Thursday, 23 December 2021 at 12:00 and resume business on 03 January 2022.**

**SAVA wishes all its members and their families a joyous festive season and everything of the best for the year ahead.**

**Kind regards**
**Gert Steyn: Managing Director**

**Geagte SAVV lid**

**Neem asseblief kennis dat Vethuis sal sluit op Donderdag, 23 Desember 2021 om 12:00 en sal heropen op 04 Januarie 2022.**

**Die SAVV wens alle lede en hul families 'n wonderlike feestyd en alles van die beste vir die jaar wat voorlê.**

**Vriendelike groete**
**Gert Steyn: Besturende Direkteur**




# VACCINATION BOOKS

**The LAST ORDERS for 2021 for vaccination books will be 30 November.**

**No orders will be accepted after this – this is to ensure that stock will be dispatched by 15 December 2021.**

**Orders for 2022 will resume on 17 January.**

**To order/for more information contact Debbie Breeze on 012 346 1150 or debbie@sava.co.za**




**The SAVA Stress Management Hotline is there to assist members who are experiencing personal problems by offering access to professional counselling/advice.**

The hotline can assist with referrals or simply offer much needed emotional support when anxiety, depression, anger, grief, lonelinessand fear are at their highest.




**The following SAVA members are available on the SAVA stress management hotline. If required, they will refer you to professionals.**

| | | |
|---|---|---|
| Ken Pettey | 082 882 7356 | ken.pettey@gmail.com |
| Tod Collins | 083 350 1662 | tcollins@isat.co.za |
| Aileen Pypers | 072 599 8737 | aileen.vet@gmail.com |
| Willem Schultheiss | 082 323 7019 | willem.schultheiss@ceva.com |
| Mike Lowry | 084 581 2624 | mikelowry@sai.co.za |

**24-Hour, Toll-Free Helpline (manned by psychologists, social and frontline healthcare workers):**
**0800 21 21 21**

# PRESS RELEASE

**16th November 2021**

**The South African Veterinary Association (SAVA) and Vetstream have today announced a collaborative partnership to provide all members of the Compulsory Community Services (CCS) free access to all six peer reviewed clinical Vetlexicon services (Canis, Felis, Lapis, Exotis, Equis ,and Bovis) relating to the veterinary care of dogs cats, rabbits, exotics (ferrets, guinea pigs, and reptiles) as well as horses and cattle.**

**Mark Johnston (CEO of Vetstream) explained that we fully appreciate that the first year or so in practice can be particularly hard as one finds our own feet, but the situation is particularly challenging for the new graduates in South Africa because they are expected to be sent into the community across South Africa often in very challenging and isolating circumstances and deliver the full range of veterinary services that need their clinical support. SAVA supports the new graduates carrying out their year in the CCS with a mentorship programme but it does not take away from the requirement to have access to the point of care information to help with an infrequent condition, or not so well practiced technique.**

**The support by Vetstream means that all CCS participants will have access to more than 26,000 peer reviewed articles, images, videos, sounds, and owner information sheets provided by more than 1,100 leading veterinary experts from around the world to help provide them with comprehensive and up to date point of care information to help them provide the best veterinary care that they can.**

**Magdalena Jannasch, past-President of the IVSA who is currently busy with her Compulsory Community Service year in rural Free State of South Africa said: "I am presented daily with a variety of cases across different species without more experienced colleagues on site to refer to. Knowing everything is impossible, but knowing where to find the information you need already gets you halfway to where you want to be. I've had access to Vetlexicon since the start of this year and I can honestly say I use it every single day. It's perfect for a quick reference to refresh my memory while working up a case, but has also been super helpful when preparing for a new surgical procedure coming up. It is definitely a service that I would continue to use beyond my CCS year."**

**Gert Steyn, Managing Director of SAVA said:**

**"We are committed to supporting the 'recent graduates by providing Vetlexicon free of charge , working for their CCS year to help and support them in their first year in practice, where the transitions into practice can be particularly challenging. The SAVA provides several key member benefits to its members and for its Specialist Interest Groups and this novel initiative is the first of several that we are discussing with Vetstream to help different parts of our membership."**


**Further information:**

| Vetstream | South African Veterinary Association |
|---|---|
| Mark Johnston – CEO<br>Three Hills Farm, Bartlow, Cambridge, CB2 4EN, UK<br>Tel: +44 (0)7778 2190000<br>mark.johnston@vetstream.com | Gert Steyn – Managing Director<br>Monument Park, Pretoria, 0105, South Africa<br>+27 12 346 1150<br>vethouse@sava.co.za |

**Further information:**

South African Veterinary Association
Suid-Afrikaanse Veterinêre Vereniging

# CALL FOR NOMINATIONS FOR SAVA AWARDS AND HONORARY MEMBERSHIP 2022

**Nominations for the SAVA Awards are invited. These awards are conferred on persons who have made exceptional and significant contributions in the fields of Veterinary Science or the Veterinary Profession and they serve as a prestigious form of recognition of distinguished service. They require sufficient but concise justification for the nomination in the category selected, as outlined in the criteria listed for each category. The presentation of awards will be made at a suitable venue and occasion identified by SAVA and this usually occurs every second year to coincide with the Gala Dinner of the SAVA Biennial Congress. Please adhere to the nomination guidelines as set out below.**

### 1. GOLD MEDAL OF THE SAVA

**Awarded to any person, in recognition of outstanding and sustained scientific achievement, with a major impact in the field of veterinary science in South Africa. The medal will only be awarded once to a particular person, and there will be one award per year. The award requires a very comprehensive curriculum vitae and motivation.**

### 2. PRESIDENT'S AWARD

**Awarded to any veterinarian registered with the SAVC in recognition of outstanding service to and advancement of the veterinary profession in South Africa. The award will only be bestowed once on a particular person, and there will be one award per year. The award requires a very comprehensive curriculum vitae and motivation. .**

### 3. BOSWELL AWARD

**Awarded to any member of the SAVA for eminent service rendered to the profession through the SAVA. The award may be bestowed upon more than one person in a particular year.**

### 4. CLINICAL AWARD OF THE SAVA

**Awarded to any veterinarian or group of veterinarians who are registered with the SAVC and have excelled in applied veterinary practice. There is a limit of one award per clinical discipline per year. Past recipients become eligible for another award after a period of five years, for a different contribution.**

### 5. RESEARCH AWARD OF THE SAVA

**Awarded to one or more veterinarians for a body of research related to Veterinary Science, and published in scientific journals, that has made an important contribution to a particular field of study. Recipients of this award may be eligible for nomination for new original research. Submission to the Awards Committee may be made by candidates themselves.**

### 6. YOUNG VETERINARIAN OF THE YEAR AWARD

**Awarded to one veterinarian registered with the SAVC per year, younger than 35 years of age or who has not been registered for longer than 10 years and who has made a significant contribution to veterinary science in his / her work sphere.**

### 7. SOGA MEDAL

**Awarded in recognition of exceptional community service rendered by a veterinarian registered with the SAVC or a veterinary student enrolled at a South African veterinary faculty. In addition to veterinary-related services, other forms of community service may be considered to support the nomination.**

### 8. CITATION OF THE SAVA

**The SAVA may bestow a citation upon one or more persons, including non-veterinarians, in recognition of specific achievements and / or meritorious contributions to the veterinary profession or the SAVA. More than one citation may be bestowed per year.**

### 9. HONORARY LIFE MEMBER

**Any SAVA member who has rendered long and outstanding service to the veterinary profession may be awarded Honorary Life Membership. Honorary Life Membership will not be granted to more than three people in one year.**

### 10. HONORARY ASSOCIATE LIFE MEMBER

**Any person who is not a veterinarian and who has rendered outstanding service to veterinary science, or the veterinary profession may be awarded honorary associate life membership. Honorary Associate Life Membership will not be granted to more than three people in one year.**

**All nominations must be supported by:**

- Submissions must be made on the official nomination form available from the SAVA office.
- A brief motivation in terms of the conditions of the specific award, including the impact the work of the nominee has had. Evidence supporting the motivation, such as testimonials, may be included.
- A full *curriculum vitae* of the nominee, including a list of publication(s) where applicable and all the contact details of the nominee.
- Copy (ies) of the relevant publication(s) in the case of the Research Award.

**Please note that:**

- Any member of the SAVA may submit nominations. Members are encouraged to channel their nominations via a group or branch.
- Non-SAVA members may be nominated for all categories except the Boswell Award and Honorary Life Membership.
- Unsuccessful nominations of previous years may, at the discretion of the Awards Committee, be held over for consideration in the following year.
- Where the nominator and seconder have indicated their permission, award categories of nominations could be changed by the Awards Committee.
- Members of the Awards Committee are permitted to propose or second candidates for awards, on condition that they recuse themselves when such nominations are discussed.

The onus is on members to submit appropriate nominations by the due date.

Failure to comply with the above will lead to disqualification of the nomination.

**All nominations, in electronic format, marked for the attention of Prof G Bath, Chairperson, Awards Committee of the SAVA, must reach the SAVA Secretary Elize Nicholas elize@sava.co.za by 26th FEBRUARY 2022.**

**Nomination forms may be obtained from Vethouse or the SAVA website or contact Elize Nicholas: elize@sava.co.za or Tel: 012-346 1150 / 072-274 5434**

# Meet the SAVA team

## Ms Hanlie Swart



At the front door of SAVA, you will be greeted by the friendly face of Ms Hanlie Swart.

The same goes for the welcoming voice when calling SAVA.

Ms Swart (Hanlie) has her birthday on the **7th of December,** and Vetnews would like to congratulate her on the celebration of her special day.

Apart from helping members with their questions, she also assists non-members to connect to the correct people within SAVA regarding their queries.

Hanlie's first pet was a little cat called Assie (despite being allergic to cats), and she loves the big and small dogs, namely Yorkies and Boerboels.

Hanlie dreams of doing the Camino one day.

Covid cured Hanlie of smoking, and she happily enjoys reading, crocheting, knitting and running

## Ms Susan Heine



She is called SAVA's own minister of finance. Meet Ms Susan Heine. Ms Heine (Susan) is responsible for everything to do with money, and she will let you know when yours is outstanding.

Susan is not only a number cruncher; she loves hunting and vacations in the bush.

Her dream is to one day tour the world.

Susan's first pet was a poodle called Dian, but her current favourite animal is a Dwarf Rabbit.

Vetnews wishes Susan a wonderful birthday on the **9th of December**

# In Memoriam

## HULDEBLYK AAN DR PIERRE STRYDOM
## 30 Maart 1930 – 01 November 2021



Ons klasmaat, Helperus Francois gedoop, maar lewenslank as Pierre bekend, is na 'n onverwagse, relatief kort siekbed op Maandag 1 November in die rype ouderdom van 91 jaar oorlede.

Pierre is in 1930 op Cradock gebore waar hy matrikuleer het. In 1949 het hy met sy veeartsenykundestudies aan die Universiteit van Pretoria begin waar ons hom eers leer ken het. Die keuring vir die kursus se tweede jaar op Onderstepoort was baie straf, maar Pierre het hiermee geen probleme ondervind nie. Ons onthou hoe sy naam na toetse altyd onder die heel boonstes op die lys verskyn het van die groot getal studente in medisyne, tandheelkunde, veeartsenykunde en huishoudkunde wat almal saam die algemene eerstejaarkursus moes voltooi voordat hulle, na keuring, hulle keusevakrigtings kon voortsit.

Pierre het hierdie pretasie vermag ten spyte van die feit dat hy, as eerste jaar Voortrekkerhuis koshuisstudent, senior studente se tydrowende ontgroeningspraktyke moes verduur asook gereeld rugby-oefeninge en wedstryde as lid van UP se Onder 19A-span bywoon. Hy het ook dwarsdeur sy studiejare te Onderstepoort vir die Fakulteit se eerste span uitgedraf. Aan die einde van 1953 het Pierre sy skitterende studenteloopbaan voltooi deur met lof te slaag en die gesogte Theilermedalje as topstudent van ons klas te verower.

Hy is in 1956 met Trudie Malan, as senior skooldogter reeds uitgesoek, getroud. Die egpaar het twee dogters en een seun. Die seun is 'n regsgeleerde terwyl een dogter onderwys gee en die ander een, benewens huisvrou, ook aktief by liefdadigheid en skoolsake betrokke is. Aan Trudie en haar uitgebreide gesin dink ons 5 oorlewendes van die Klas van 1953 steeds met groot empatie. Hulle het die voorreg ervaar om 'n uitsonderlike man, pa en oupa te gehad het wat tot aan die einde van sy lewe vir hulle 'n leermeester op talle terreine, insluitende "aanvaarding, berusting, vrede en liefde" (sien begrafnisbrief) was. Pierre het 'n baie interessante, gediversifiseerde loopbaan gehad.

Hy was 'n entoesiastiese natuurmens en het 'n veearts geword om hom in staat te stel om lewenslank by die natuur betrokke te kan wees. Hy was altesaam vir 5 jaar in privaatpraktyk en was vir 10 jaar by Veterinêre Velddiens werksaam – 8 jaar as senior staatsveearts.

In 1967 het sy belangstelling in voorkomende medisyne van diere en diereproduksie daartoe gelei dat hy by die farmaseutiese- en landboubedryf betrokke geraak het. Sentrachem, wat die hele chemiese bedryf bestryk het, is deur Ettienne Rossouw van Sasolfaam gestig. Pierre was aanvanklik by KOP/Agricura werksaam, wat toe deur Sentrachem oorgeneem is en die landbouchemikalieëbeen van Sentrachem geword het. Dissiplines soos veevoeding, en saadproduksie het bygekom. Hy moes sy kennis van die landboubedryf geweldig verbreed om die vele nuwe vakrigtings te bemeester. Onder sy leiding het die firma byvoorbeeld by die voerkraalbedryf betrokke geraak waar die kennis van beesvoeding wat hy op Onderstepoort opgedoen het, goed te pas gekom het. Die eerste groeistimulant vir dié bedryf is ook saam met 'n Amerikaanse maatskappy plaaslik ontwikkel. Agronomiese boerdery-aktiwiteite, soos die produksie van kontantgewasse, het egter weldra ook deel van sy dissipline geword.

Sentrachem het inderdaad, in samewerking met 'n buitelandse vennoot, op 'n stadium die wydgebruikte onkruiddoder atrazine, in die Oos-Kaap vervaardig. Daar is selfs veevoermaatskappye in 'n westerse land en 'n Afrikaland tot stand gebring. Daar is ook met die Staat saamgewerk om malaria te bestry met DDT wat deur die firma vervaardig is. Dié veldtog was besonder doelreffend en DDT is, ten spyte van emosionele teenkanting, weer in verskeie Afrikalande, onder andere in SA, met vrug gebruik om die veld wat malaria gewen het, terug te wen. Pierre het op hoë vlak met die buiteland saamgewerk. Goeie verhoudings is byvoorbeeld met firmas in twee Asiatiese asook in twee westerse lande opgebou, prestasies wat deursettingsvermoë en baie diplomasie geverg het.

Bestuurs- en bemarkingsdissiplines moes bemeester word, wat verdere studie genoodsaak het. Toe kom die vakbondwese in al sy velheid en sy politieke doelwitte. Op een stadium was daar 'n 10-weke staking wat al Sentrachem se fabrieke betrek het. Dié ervaring het hul seun laat besluit om in arbeidsreg te spesialiseer. >>> 30

Tussen al sy ander bedrywighede het Pierre ook as eksterne eksaminator in Entomologie by die Onderstepoort Fakulteit gedien op versoek van vroeëre klasmaat Charlie Howell, hoof van dié vakrigting te Onderstepoort en dosent aan die Fakulteit. Hy het ook as eksterne eksaminator in Veekunde vir finale jaar BSc-Landbou studente aan die Fakulteit Landbou opgetree.

Die hoogtepunt in Pierre se loopbaan was toe hy as Besturende Direkteur van Agrihold, een van Sentrachem se filiale, aangestel is.

Dié pos het hy tot sy aftrede in 1993 beklee.

Die Strydom egpaar het hulle verblyf na aftrede tussen woonplekke in Pretoria en Kaapstad verdeel en heelwat gereis, onder andere na ongewone lande soos Jordanië en Iran. Maar benutting van die plaaslike natuur was hul grootste plesier. Veral 'n plek soos die Krugerwildtuin het baie aftrek gekry.

Pierre het sy breë kennis van die natuur altyd vryelik met sy kinders en kleinkinders gedeel met die gevolg dat dat sy liefde daarvoor, tot sy groot vreugde, ook by hulle gevestig is en deel van gesinssametrekke en -vakansies geword het. Die egpaar se pragtige tuin te Ruimtesig in Pretoria was Pierre se groot trots, wat hy tot kort voor sy siekbed met absolute toewyding steeds self bewerk het.

Dit was vir ons – Rudolph Bigalke, Jean du Plessis, Japie Jackson, Margaret Rose en Johan Schutte, tans enigste oorlewendes van die Klas van 1953 – 'n besondere voorreg om Pierre Strydom as skrander klasmaat en lewenslange kollega en vriend te hê. Nes Trudie en haar gesin, sal ons hom baie mis. V

# DR MATTHYS NOLTE TROSKIE
# 25 September 1960 - 31 Oktober 2021



Die skaapbedryf het 'n groot steunpilaar verloor op 31 Oktober 2021 toe Matthys Nolte Troskie (61 jaar) aan Covid 19 verwante komplikasies oorlede is.

Nolte Troskie is op 25 September 1960 in Colesberg gebore. Hy het skoolgegaan in Aliwal-Noord en het uitgeblink in rugby (op skool en ook op universiteit) en was ook hoofseun van Hoërskool Aliwal-Noord. In die pantserkorps het hy uitgeblink as 'n offisier wat sy troepe met wedersydse respek gelei het, en dìe persoon waarop daar pyl getrek kon word.

Na sy kwalifikasie as veearts in 1988 begin hy 'n privaat praktyk op Burgersdorp. Op 9 Desember 1989 tree hy in die huwelik met Eline van Oostum (Lienkie). Hulle sou vanjaar hul 32e huweliksherdenking gevier het. Aangesien hy beide veearts en boer was, het Nolte hom toegespits op kleinvee reproduksie, wat veral laparoskopiese inseminasie, ultrasoniese sonar (scanning) asook die bepaling van ram geslagsgeskiktheid ingesluit het. Nolte en sy gesin verhuis in 1999 na Bloemfontein. Hy en Lienkie het 2 seuns, Christian (ook 'n veearts) en Anton (elektriese ingenieur). Nolte se beroep het hom op ver paaie gelei en hy het boere geken en besoek uit elke uithoek van Suid-Afrika (asook Namibië).

Sy rustige geaardheid en akkurate manier van werk, asook sy onwrikbare geloof in God het hom baie gewild gemaak onder sy kliënte.

Nolte is op Saterdag, 6 Oktober 2021 te ruste gelê op sy plaas, Haasfontein, Colesberg distrik, soos voorheen deur hom aangedui.

Sy seuns beskryf hom as volg: "Ons Pa was ons held, ons voorbeeld van hoe 'n man moet wees, ons steunpilaar en ons inspirasie. As ons tog net eendag die helfte van die man kan wees wat ons vader was."

Lienkie se woorde: " Hy was 'n man met 'n suiwer, sterk, eerbare, liefdevolle karakter - ek het die beste van die beste gehad as my eggenoot". V

# DR VIC LIEBMANN: A TRIBUTE TO A SUPERB VET



In March 2021, Vic Liebmann finally succumbed to cancer at age 83. His parents had escaped the nazi holocaust from Berlin just before WW2, and Vic was born in SA on 22 November 1938. He was conceivably the oldest practising veterinarian in Johannesburg and perhaps South Africa. Right up until his passing, he was still working as a vet consultant and surgeon, still mentoring other vets. His veterinary career was his life passion, and he gave his whole being to the profession. He always took time to ensure that his staff learned and understood sound vet methodologies to handle all animals with care and compassion. He treated his team with the utmost respect and courtesy, and they were all fiercely loyal to him right to the end, and he ensured that they were handsomely rewarded after he passed away.

In addition to running his small animal practice (Corlett City Vet Hospital) for many decades, he and Stan Krawitz were also instrumental in opening the first vet clinical laboratory in Johannesburg. Many practices used this service to refine their clinical diagnoses. In addition, Vic was a member of a team of 4 vets ( Dave Moore, Brian Romberg, George Frost and himself) who met monthly in the evenings to analyse and discuss Xrays to certify Hip Dysplasia-free dogs. This committee was later taken under the auspices of SAVA under Professor Roos. Additionally, to assist pet owners in approving appropriate treatment for their pets, he founded one of the first pet medical aid societies that his clients greatly appreciated.

Vic suffered significant personal loss and tragedy in his life, yet he never complained, and when people asked how he was, he always replied: " Good – good !" In his humble way, he never wanted to worry others or make himself the centre of attention. In 2017, he decided to close his practice to continue as a part-time locum vet due to his illness. His clients spanning over 50 years of practice, were devastated. A great many wrote emotional outpourings of emotion.

A few of their tributes are summarised below:
***"An exceptional vet; an excellent diagnostician; an outstanding surgeon; an empathic and honourable gentleman; a true healer, a vet with the highest of ethics; a man of great humility; much more than a vet – always a great support; sensitive to our feelings as pet owners; cheerful and kind; adored by his staff; a wonderful sense of humour; the best vet ever! Utterly irreplaceable! '***

He graduated from Pretoria University in 1961 and attained an M. Med. Vet. (Med) in 1979. His Masters degree dissertation was in Canine Cardiology. Over the years, many of his colleagues often enlisted his professional cardiology opinion. He also had a passionate interest in photography in which he was awarded a fellowship at the South African Institute of Photography. He adored visiting every game park in Southern Africa.

He was a regular attendee at monthly vet meetings and conferences with an insatiable thirst to keep up to date to further his knowledge and skills.His passing has left his wife, children, grandchildren, many lifelong friends and thousands of long-standing clients and colleagues bereft. But we are comforted that we were so privileged to have had the most wonderful human being as a role model of Ubuntu, humility, kindness, wisdom and dedication to excellence.

The veterinary profession has lost an outstanding vet, but his legacy will live on in the hearts and memories of all he touched during his lifetime.

# INFORMATION ON DECEASED VETERINARIANS

| NAME | DATES |
|---|---|
| Dr Bernard GW Horton | 30/10/1929 – ?/07/2020 |
| Dr Ferreira du Plessis | 23/06/1977 – 26/11/2020 |
| Dr Darren Edward Glanville | 10/07/1965 – 28/11/2020 |
| Dr Glen Winston Burroughs | 16/05/1941 – ?/01/2021 |
| Dr Gordon Beverley | 14/03/1937 – 07/02/2021 |
| Dr Corli Goosen | 03/03/1978 – 12/06/2021 |
| Dr Zarni Peter Kempster | 03/09/1931 – No date |
| Dr Dirk Christiaan Triegaardt | 01/11/1959 – 02/01/2021 |
| Dr Petra Kitshoff | ? – 07/01/2021 |
| Dr Spencer Friedman | ? 1941 – 20/05/2021 |
| Dr Omashini Armoogum | No details available |

The Veterinary History Society tries to put together information on the lives and contributions of departed veterinarians.

**We are hoping that readers of VetNews can assist us with <u>any information</u> about these veterinarians please.**

Whatever information you might have, please send it either to:

Elize (elize@sava.co.za)

or

Susan March (susan.marsh@up.ac.za)

Every item or recollection will help us to construct a biographical record for our archives.

# Influential Life Coaching

# WORKING DURING THE HOLIDAYS




**Dr Mats Abatzidis**

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I hope this article in my column finds you and your families well and safe!!! The end of the year is almost upon us and creates an interesting mixture of emotions amongst us. Some of us will take some time off to rest and enjoy the festive season, while others view this time of the year as a hectic time, and then… you try juggling family gatherings, shopping, hosting, planning, travelling, etc. As the list is considered and you see all these activities panning out in your mind, there's a good chance you'll lose focus and momentum if you are one of those individuals or businesses that is expected to be working during the upcoming festive season.

There will be demands from home and work simultaneously. There will be expectations from your family and your clients. We need to be mindful of this and understand that it may be overwhelming at times, not to mention that it can contribute to burnout. You have already had an entire year of working, and especially if you haven't had any breaks to rest, pushing yourself even harder now may be too much. An added dimension to this conundrum is that the famous "to-do list" grows while your available time seems to shrink, creating stress, distractions, demotivation, and reduced performance all around.

Here are some ideas to help you stay productive when you need to be:

1. **Take a few days off for yourself**. If you have a few leave days left at the end of the year, take time to do a little shopping or enjoy a day with your spouse, kids and loved ones. Use the opportunity to refresh and recharge during the busy festive season.

2. **Plan & communicate your expectations and schedule early with your family**. Inform all relative parties of when your busy periods are, e.g., the first two weeks of December, and communicate this early, along with your commitment to be expected. Consider delegating tasks where possible, reducing overtime obligations, and more creative scheduling options that allow you to leave work earlier than usual. For example – schedule a farm visit or house call that is already on the way home.

3. **Have a to-do list BUT prioritize tasks**. Get your personal and professional tasks and projects into a digital or paper system and out of your head to avoid memory lapses and associated stress. Then decide which to complete now and which could be relegated until the new year. If you have ever done that before, you will remember the immense relief of clearing your mental clutter and removing burdens. It makes your festive season more joyful and re-energizes you to complete the critical tasks.

4. **Avoid multitasking (task shifting, more appropriately)**. Preferably work on one task at a time. If you have numerous tasks that need to be addressed simultaneously, ask people for assistance. It is also recommended that you try and avoid working on personal and work-related tasks simultaneously. Avoid distractions while working, e.g. don't squeeze in shopping at lunch or buy gifts online. When at work, focus on work. The trick is to forget about "seasons" and focus on today. Complete the holiday chores during your spare time. It will also free you up from trying to do too many things at once,

5. **Start tasks early where possible**. Example: start your holiday shopping earlier than you have in the past, and get a head start on any upcoming projects at work. This way, when you're busy with work tasks and planning family gatherings later this month, you'll have fewer to-do items on your plate.

6. **Get into the spirit**. Being cheerful during the holidays can make a big difference in your performance, and you'll also be more pleasant to be around. Don't talk about work all the time. Keep in mind the holiday season is for celebration – look for something to celebrate every day. Think about your loved ones, your luxuries and what you are most grateful for.

7. **Physical maintenance is essential.** Exercise more, not less. Sleep more, not less, even if it's thirty minutes more a night. When you make time for these activities, the rest of your schedule falls into place. Avoid excessive sugary foods and alcoholic beverages as they will impact you mentally and physically the next day at work.

8. **Review your activity**. At the end of each day and week in December, review your level of productivity. Did you get done what you intended to? If not, what got in your way? Not being able to say no? Too many distractions? Some of your own feelings and emotions? What could you have done differently? What will you do differently tomorrow? "Be sure to acknowledge what worked and do more of that!!!

Next month, we will continue this principle and look at positive ways to embrace the new world post COVID19, healthy, safe, and reengaged.

# Human versus Animal – What's the Difference?

Tanya Grantham



Veterinary physiotherapy was promulgated as a new profession in South Africa in 2017. Practitioners in this field have been plying their trade for far longer. There must be a precedent, and demand, to register a new profession. The reality is that much research has been conducted in the field of human physiotherapy. Research in veterinary physiotherapy/rehabilitation is recent, not yet prolific, but certainly trending (more on this next month). The argument frequently encountered is there is no proof for veterinary physiotherapy. The author's counterargument is that a lot of evidence exists in human physiotherapy, and as veterinarians, we are treating other mammalian species; the physiological similarities cannot be disputed. Dogs and horses have ligaments, tendons, muscles, and bones with the same structure as humans. The same principles of tissue regeneration and adaptation apply. A comparison needs to be drawn between human physiotherapy and animal physical rehabilitation. Extrapolation has brought the profession to this point. After discussing this concept with Stephen Louw, a practising biokineticist for more than 20 years, relevant information was shared. The term biokinetics stems from "*bio*" = Life and "*kinetics*" = Movement or, put another way, **life through movement**. What could be more apt for our animal patients? Biokinetics focuses on third phase rehabilitation.

First phase: Diagnostics and is the sphere of doctors, surgeons and other specialists. Once the diagnosis is made, the choice is to either intervene in the form of surgery or to prescribe medicines. Human physiotherapists may also make diagnoses. In South Africa, veterinary physiotherapists may not diagnose. Only a veterinarian may make a diagnosis.

Second phase: this is the recovery phase following injury or surgery. Swelling, pain and inflammation characterise this phase. In South Africa, this is the phase in which physiotherapists utilise their skills. Physios assist with healing and return to mobility. In many instances, after this stage, a weakness remains.

Third phase: this is the strength phase, and in South Africa, the area in which biokineticists have their niche. The return to full function is the focus. The goal for humans is to return to pre-injury conditions.

In animals, the comparison would be canine or equine athletes that return to sport (at a competitive level or the same level before the injury).

In veterinary medicine, the veterinary physiotherapist combines second and third phase rehabilitation. An advantage of this over human practice is the continuity afforded to all parties involved (client, patient, and therapist).

As veterinarians, we are first phase practitioners. It is time to appreciate the benefits of incorporating the second and third phases of rehabilitation into the recovery plan of our patients. The literature is clear regarding neuromuscular regeneration and the development of atrophy. Both take time to develop. Third phase interventions focus on retraining, resetting patterns and returning to normal function. Thus, it is logical to combat these developments (atrophy and patterning) sooner rather than later. Ultimately, the surgery or recovery from injury will be deemed more successful.

To find a SAVC registered or authorised rehabilitation practitioner in your area, please go to www.saapra.co.za







# Entropion

**Dr Antony Goodhead,**
Specialist Veterinary Ophthalmologist,
Johannesburg and Cape Animal Eye Hospitals,
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Entropion is the inversion of part or all of the eyelid margin toward the globe, resulting in the tarsal margin or the outer skin coming into contact with the conjunctival or corneal surface, or both. The degree of entropion is considered mild when the margin is tilted by about 45°; moderate when tilted by about 90°; and severe when the margin is turned inward by about 180°. Entropion may be lateral, medial, angular, or total and may affect the lower or upper lid, or both.

Entropion can be divided into categories:

1] **Primary,** such as congenital or developmental entropion; and

2] **Secondary or acquired,** such as spastic or cicatricial.



**Primary entropion** may be congenital or developmental and is common in purebred dogs, it is believed to have an inherited component, but the genetic basis is not well understood. It is likely to be polygenic, but a dominant inheritance with incomplete penetrance is suspected. Severe entropion of the entire lower lid occurs in breeds including the Chow Chow, Shar Pei, Bouvier des Flandres, Bulldogs, Great Dane, Labrador Retriever, Neapolitan Mastiff and Rottweiler. Commonly, this form manifests at 6-9 months old. The American College of Veterinary Ophthalmology has the trusted "Blue Book", which is the reference manual for suspected hereditary or breed predisposed eye problems. It makes it interesting to read that entropion is never confirmed to be hereditary but is left as a "breeder option". In the author's opinion, the refusal of insurance companies to pay for the surgical correction of entropion based on it being a hereditary condition is probably incorrect. They should prove or confirm with absolute certainty that the condition is genuinely congenital in a specific patient. They are unlikely to be able to do this due to confounding factors, as discussed below

Conformational entropion is believed to be inherited in a large number of dog breeds, including the Chow Chow, English Bulldog, Irish Setter, Labrador and Golden Retrievers, Saint Bernard, Shar Pei, Rottweiler, Great Dane, and Chesapeake Bay Retriever. Although conformational entropion may be present soon after eye opening, it often does not become clinically evident in many affected breeds until later in life as the skull, and associated facial skin gains their adult conformation, especially in the Shar-Pei and other breeds with a large amount of periocular skin. Occasionally maturation is associated with reduction or sometimes even resolution of entropion. For these reasons, surgery is always delayed if possible until facial maturity is achieved.

When there is a concurrent severe corneal disease, the surgery has to be done as soon as indicated.

Entropion is likely influenced by several factors defining the skin and other structures, which make up the eyelids, orbital contents, and conformation of the skull.

Entropion may result from a difference in tension between the orbicularis oculi muscle and the malaris muscle (lower lid entropion] and is influenced by multiple conditions such as the length of the lid fissure, the conformation of the skull, the orbital anatomy, gender, and the extensiveness of folds of facial skin around the eyes. Entropion is often associated with an oversized palpebral fissure length in large or giant breeds, such as the Great Dane, St. Bernard, and Leonberger. It is commonly found in the lateral half of the lower lid and the lateral canthus. Medial entropion frequently occurs in the Pekingese, Shih Tzu, Pug, Toy and Miniature Poodle, Cavalier King Charles Spaniel, and English Bulldog. In breeds like the Shar-Pei and Chow Chow, the lower and upper eyelid entropion can be present as early as 2–6 weeks of age

**Acquired entropion** causes include spastic and cicatricial [scarring] entropion. Spastic entropion may occur secondary to superficial corneal ulceration, and a complete ophthalmic exam is necessary to exclude other causes of corneal ulcerations.

Examining the patient before and after application of topical anaesthetic may help assess the severity of entropion and prevent over/unnecessary correction. It is not always obvious, even after a complete examination. Phthisis bulbi, enophthalmos and microphthalmos may lead to entropion due to loss of lid support.

**How do you approach these cases?**

It is crucial to eliminate the spastic component before permanent surgical correction of entropion; otherwise, overcorrection with postoperative ectropion may occur. Therefore thorough assessment of entropion includes determination of the cause and relative contribution of blepharospasm through the use of the following steps:

1. Assessment of the tear film with the Schirmer tear test. (Dry eye can contribute a significant spastic component of entropion.)
2. Examination of the patient before and after the application of a topical anaesthetic. [eg. Novasin drops]
3. Fluorescein staining. (Ulcers may be the cause or result of entropion. Regardless, they will exacerbate the spastic component.)
4. Examination with magnification for coexistent cilia disorders.
5. Assessment of aqueous flare and intraocular pressure because glaucoma and uveitis are painful, and the resulting blepharospasm could cause or exacerbate entropion.

Although there are surgical techniques specific to each procedure, the following general principles apply to all:

1. Always eliminate other causes of spastic entropion before deciding on the extent of surgical resection. Remember that the goal is to correct the "conformational" or "anatomic" component only, not the spastic component. Correction of the conformational component will also alleviate the spastic component.
2. Accurately assess the extent of skin resection before sedation, premedication, or induction of anaesthesia. Consider the use of a dermatologic marker pen. If bilateral surgery is planned, make careful preoperative notes of whether the extent of resection required is symmetric.
3. Under-correction with the need for a second operation is preferable to over-correction, which causes cicatricial ectropion.
4. Minimize surgical tissue trauma.

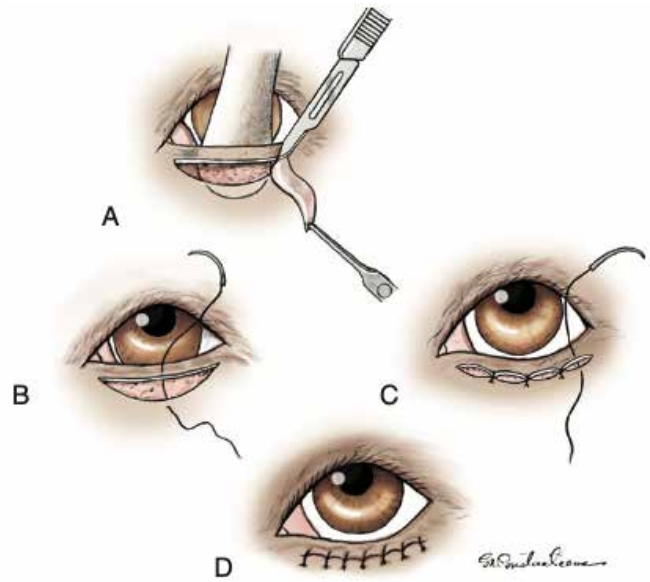
5. It is unnecessary to remove orbicularis oculi muscle; doing so increases haemorrhage, operating time, postoperative oedema, and risk of infection.
6. Use fine suture material (6/0 Vicryl or smaller in dogs and cats).
7. Use fine, swaged-on, cutting suture needles.
8. Place multiple, closely spaced sutures of small "bites" with the goal being excellent apposition. Sutures will not be under great forces postoperatively.
9. Use an Elizabethan collar until at least 2 to 3 days *after* suture removal if non-dissolvable sutures are used.
10. Provide adequate postoperative analgesia for the first 7 to 10 days

When wound contraction is complete, delay any decision regarding a second operation for at least 4 to 6 weeks. For the first few days after surgery, while the tissues are swollen, the eyelid may appear overcorrected, but as swelling subsides (over 5 to 7 days), the correction can be better evaluated.

Treatment of these underlying conditions and their associated spastic entropion must be completed before surgical correction of any residual conformational component of the entropion.

**Surgical approach:**

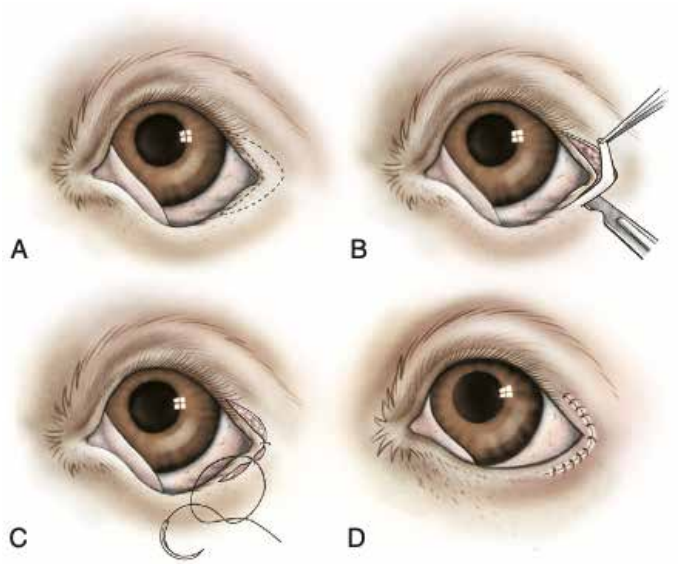
Multiple techniques have been described, but the Celsus-Holtz and its modifications are currently the basic techniques for treating most types of entropion. Surgical correction is begun with an incision 2-2.5mm from and parallel to the eyelid margin and extending at least 1mm lateral and medial to the entropic part. If the first incision is too close to the eyelid margin, there will not be enough tissue for suturing, and if it is too far, sufficient eversion will not be achieved. Estimating the width of the secondary incision is the challenging part. The variable sectility of the tissues around the eyelid further complicates the incision path.




*Sketches from Slatter's fundamentals of veterinary ophthalmology*

The surgical wound is opposed with 5/0 or 6/0 [Vicryl] polyglactin using a simple interrupted suture pattern. For the standard Celsus-Holtz procedure, the first suture placed should be at the widest point of resected tissue.

Each following suture is placed to bisect the remaining spaces so that excellent apposition is achieved. For the modified Celsus-Holtz arrowhead technique, the first suture is placed at the lateral canthus, whereafter the skin wound is sutured as for the Celsus-Holtz. The lateral arrowhead is used in almost all our canine patients with good results. However, recurrence and complications are not uncommon, and we do not regard this as a straightforward, easy procedure. Entropion correction is an extremely difficult surgery to attain excellent results.




*Sketches from Slatter's fundamentals of veterinary ophthalmology*

**References:**

1. Gelatt KN, editor. Veterinary ophthalmology. Sixth edition. Hoboken, NJ: Wiley-Blackwell; 2020.
2. Maggs DJ, Miller PE, Ofri R, Slatter DH. Slatter's fundamentals of veterinary ophthalmology. 5th ed. St. Louis, Mo: Elsevier; 2013. 119-122
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# Parvovirus and Enteral Nutrition

Dr Angeliki Kaldelis BSC, BVSC, RCVS

Canine Parvovirus (CPV) is one of the leading causes of acute gastroenteritis in puppies and is found worldwide. Typical clinical signs of CPV include vomiting, hemorrhagic diarrhoea, and leukopenia, and it represents a significant threat to young dogs due to the severity of these clinical signs.

The target tissues for viral replication are the intestinal crypts and the lymphoid organs, but the virus can spread to all tissues. Active viral replication in the intestinal crypts causes rapid lysis of the stem cells, resulting in an impaired epithelial turnover of the villous tips[1]. The impaired turnover leaves the intestinal surface unable to adequately absorb nutrients, prevent fluid loss, or prevent bacterial translocation, resulting in diarrhoea and nausea typically seen in CPV infection. Treatment involves supportive care and management of symptoms[2], with the primary goal of treatment to restore fluid and electrolyte balance and prevent concurrent infection by opportunistic bacteria[1]. Nutritional support is considered an essential part of managing critically ill patients[3]. Early enteral nutrition in dogs with CPV has shown to result in earlier clinical improvement, weight gain, and improved gut barrier function, limiting bacterial or endotoxin translocation[4].

Whenever possible, the enteral route should be used as it is the safest, most convenient and most physiologically sound method of nutritional support[3]. Enteral nutrition also benefits the GI tract by providing luminal nutrition for the enterocytes[5].



This helps prevent ileus, gut and villus atrophy, permeability and loss of GI barrier function;[3] and helps preserve normal intestinal bacterial flora and stimulates the gut-associated lymphoid system. Glutamine is a nutrient of particular importance to rapidly regenerating cells, such as the GI tract and immune system. This amino acid is used as a source of energy by intestinal mucosa cells. Low intake during a critical phase of high requirement may compromise intestinal barrier integrity and increase the risk of villi atrophy[6].

Lack of proper nutrition will only worsen the nutritional and metabolic state of these ill patients, making it more difficult for them to recover. It will also compromise the body's ability to synthesize important substances such as albumin, which will affect the drug pharmacokinetics[3]. In dogs, a period as short as three days of anorexia has been documented to produce metabolic changes consistent with those seen associated with starvation in people. There is thus some consensus that there is an urgent need to implement a nutritional intervention (e.g. place a feeding tube) when a dog (or cat) has not eaten for more than five days[3]. Studies in canine patients with CPV not only prove the benefit of **early** nutrition interventions (as stated above) but that it also produces few complications.

The lack of severe consequences of initiating feeding early in these patients dispels the myth that feeding early is fraught with complications. Nasoesophageal and nasogastric feeding tubes are relatively easy and convenient methods of nutritional delivery for these patients[3].

The goal for patients with GI disease is to feed a highly digestible diet as the ability of these animals to digest food and absorb nutrients is compromised. Particular attention should be paid to the digestibility of the ingredients providing dietary protein, fat and soluble carbohydrates.

Because these patients typically have dysrexia in addition to clinical signs of vomiting and diarrhoea, it is recommended that most patients are fed small frequent meals when food is introduced. Feeding energy-dense diets are ideal as they help to reduce meal volume[5]. Daily energy intake for hospitalized patients should be calculated as resting energy requirement (RER), as follows[3]:

**RER (in kcal) = 70 x (body weight in kg)$^{0.75}$**

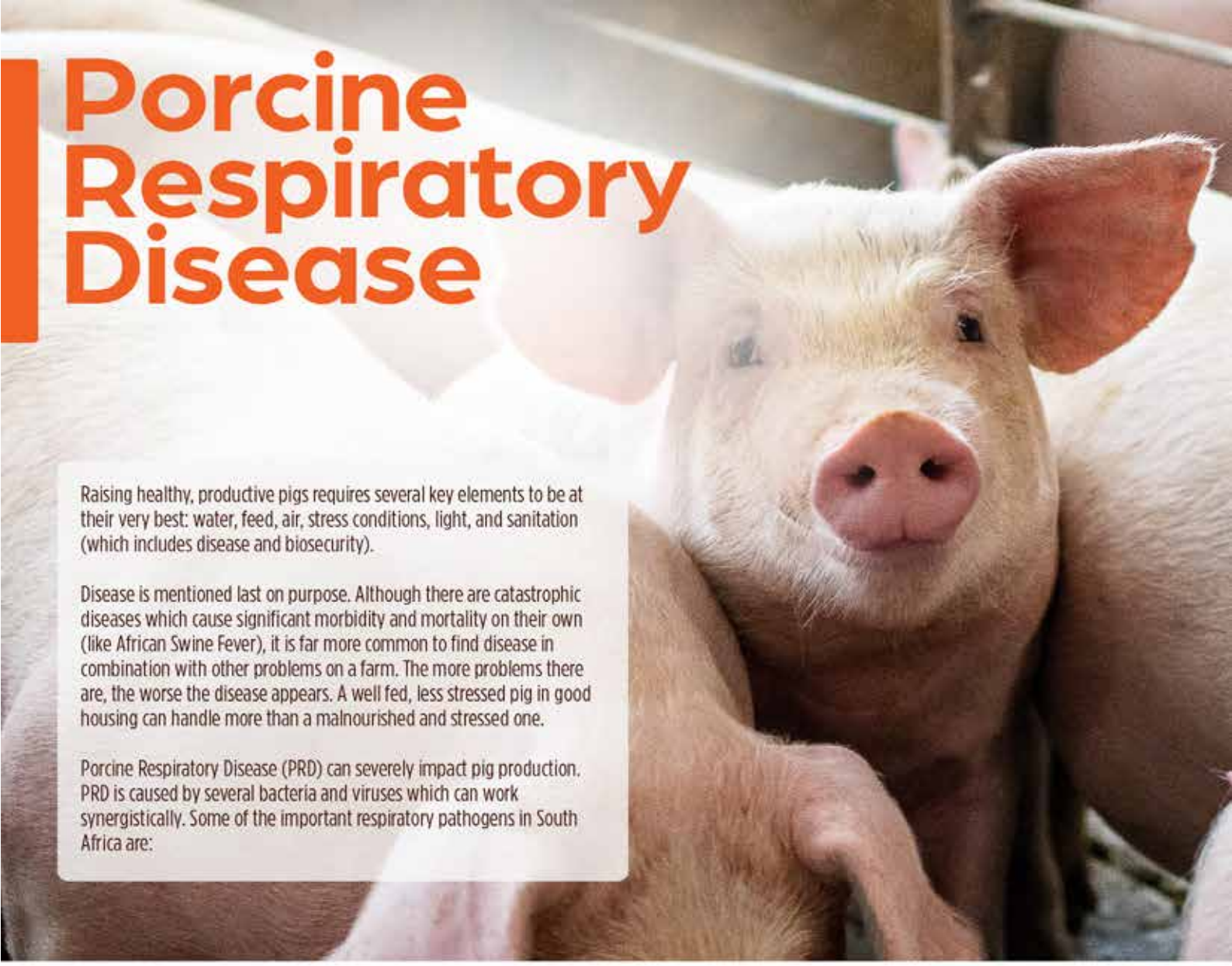
The rate at which you increase daily feeding amounts until you reach 100% RER depends on the duration of anorexia and clinical signs[5]. The below table can be used as a guide[3]:

In conclusion, careful planning and execution of a nutrition plan can be a key factor in the successful recovery of these critically ill patients[3] and should not be neglected.

*References available on request

| ANOREXIA DURATION | RECOMMENDATION | APPLICATION | | | | |
|---|---|---|---|---|---|---|
| Anorexia < 3 days | Plan to meet the requirements over 3 days | Day 1: 1/3 of requirements | | Day 2: 2/3 of requirements | | Day 3: Full requirements |
| If anorexic ≥ 3 days | Plan to meet the requirements over 5 days | Day 1: 1/4 of requirements | Day 2: 1/2 of requirements | Day 3: 2/3 of requirements | Day 4: 3/4 of requirements | Day 5: Full requirements |

# Porcine Respiratory Disease



Raising healthy, productive pigs requires several key elements to be at their very best: water, feed, air, stress conditions, light, and sanitation (which includes disease and biosecurity).

Disease is mentioned last on purpose. Although there are catastrophic diseases which cause significant morbidity and mortality on their own (like African Swine Fever), it is far more common to find disease in combination with other problems on a farm. The more problems there are, the worse the disease appears. A well fed, less stressed pig in good housing can handle more than a malnourished and stressed one.

Porcine Respiratory Disease (PRD) can severely impact pig production. PRD is caused by several bacteria and viruses which can work synergistically. Some of the important respiratory pathogens in South Africa are:

| Pathogen | Disease | Notes |
|---|---|---|
| *Mycoplasma hyopneumoniae* | Enzootic pneumonia | Serious economic impact |
| *Actinobacillus pleuropneumoniae* | Porcine pleuropneumoniae or APP | Primary respiratory pathogen, can result in high mortality |
| *Haemophilus parasuis* | Glassers disease | Normally present in healthy pigs, stress results in disease |
| *Pasteurella multocida* | Pneumonic pasteurellosis | Normally present in healthy pigs, stress results in disease |
| *Pasteurella multocida* either with or without *Bordatella bronchiseptica* | Atrophic rhinitis | |
| *Mycoplasma hyorhinis* | | Occasionally seen |
| Porcine circovirus type 2 | Porcine circovirus diseases | |
| African Swine Fever Virus* | African Swine Fever or ASF | Multisystemic disease, highly contagious, high mortality |

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## Porcine circovirus type 2 (PCV2) is a small DNA virus capable of affecting many organs resulting in a wide range of disease conditions from:

- '*post weaning multisystem wasting syndrome*' also known as PWMS (skinny, small pigs),
- to '*porcine dermatitis and nephropathy syndrome*',
- to '*porcine respiratory disease complex*' (PRDC),
- to reproductive issues.

Of these PWMS is the most economically significant.

Pigs are natural hosts with the oronasal route being the most likely way that it spreads.

There is still a lot we do not understand about this virus and how it causes disease. What is known is that it is found virtually everywhere, spreads easily (especially if there are subclinical carriers on a farm), persists very well in the environment, can mutate, and has a negative impact on the immune system and production.

A well designed, targeted vaccination program with an effective vaccine are important tools in controlling this disease.



## *Mycoplasma hyopneumoniae*

*Mycoplasma hyopneumoniae* (MH) on its own does not normally result in dramatic mortality, but in combination with other factors can lead to serious health, welfare, and economic impacts on a herd.
MH usually causes disease in piglets from 5 to 7 weeks of age. These pigs grow poorly and often have a hoarse cough which can be heard when entering the house. The pathogen is spread by direct contact or via aerosol.

MH can outsmart the host's immune system resulting in chronic, insidious infections. In combination with other diseases, weakened respiratory tract defenses (as caused by poor air quality) and a poor immune response (as in stressed animals or pigs that have never been exposed to MH) the impact on the animals gets much worse.

The swine respiratory tract has its own defenses in place to deal with potential invaders. MH damages some of these defenses making it easier for other pathogens to cause disease; including bacteria like *Pasteurella multocida* which is normally present in healthy pigs.
PRDC (see PCV section) is an emerging syndrome. MH is thought to play a primary role in this syndrome, in combination with PCV2, PRRSV* (porcine respiratory or reproductive syndrome virus) or SIV* (swine influenza virus).

A lot of work has been done on the control of MH due to its impact worldwide on pig production. It is possible to eradicate MH using strict, well designed programs in some herds. In herds that are not able to eliminate MH, vaccination becomes an important control tool to help reduce the amount of shedding by infected animals and to reduce the severity of the disease. Lung lesion scoring is commonly done at the abattoir to monitor if a control program is working for a specific farm.

## *Actinobacillus pleuropneumoniae*

*Actinobacillus pleuropneumoniae* (APP) is a primary respiratory pathogen that mostly affects pigs between 12 to 15 weeks of age. The disease is highly contagious and often fatal.

Infected pigs shed large quantities of the bacterium. The primary site of damage is the lungs. Acutely affected pigs can show signs of fever and respiratory distress. Death can follow within 2 to 3 days. The chronic form results in wasting, more susceptibility to other respiratory diseases and possibly a chronic cough. Both healthy and apparently recovered pigs can become carriers, allowing the disease to persist on the farm and flare up again in times of stress.

It is possible to treat affected animals, although chronically affected ones might not respond well to treatment. Control relies on vaccination, eradication, good biosecurity to prevent the reintroduction of the pathogen, and good management to reduce episodes of stress as much as possible. Lung lesion scoring at the abattoir is also useful to assess the presence of APP on a farm.

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## Conclusion

This is not an exhaustive list of agents that can affect the swine respiratory tract. Lung worms, for example, can also present as coughing pigs due to the damage that they cause. The pathogens described in this article are the common culprits of respiratory disease in a swine herd. It is important to remember that even if a disease looks obvious, a thorough investigation is always important to identify underlying factors and possible co-infections.

Properly identifying the root causes of disease on a farm to create a complete herd health program is much more effective than relying on treatment alone. Targeted vaccination programs form an important part of a herd health program; especially in a world that is trying to get responsible antibiotic use right.

*ASF, SIV and PRRS are all Controlled Animal Diseases (in terms of the Animal Disease Act, Act 35 of 1984)

**For further information on prevention and treatment solutions for swine respiratory disease, please speak to your Zoetis representative.**

**References:**
1. Smith, W. J., Taylor, D. J., and Penny, R. H. C. 1990 'Colour Atlas of Diseases & Disorders of the Pig' *Wolfe Publishing Ltd.* Pages 93 – 95, 120, 121.
2. Straw, B.E., et al. (2006) 'Diseases of Swine' 9th ed. Blackwell Publishing. Pages 299 – 304, 563 – 572, and 701 – 704

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# Recollections 51 - Emily (Part 2)

## Ian du Toit

Have you ever been to the Karoo on a summer night? When you look up into the firmament, it seems to enfold you with a scintillating magnificence. The Milky Way is like a swathe of an artist's brush painted with stardust. Standing outside the Colesberg town hall, on New Year's morning 1960, far away a night bird screeched and nearer I heard an owl, seeming to answer with, "who"? The frogs were still joining into Auld Lang Syne's chorus, which was being played behind us in the Town Hall of Colesberg. "It's Leap Year this year so that I can ask you", she had said, "will you marry me?"

A year before, I had returned from my holiday practical in Grahamstown. I had placed a photo on my desk back at the hostel at Onderstepoort and been ready to declare to anyone who entered, rather boldly, "This is the girl I am going to marry". But I suppose, in my honest thoughts, this was a long term hope rather than an expectation. So as the words hit home to me, that night I swayed a bit on my feet, "was this really happening?" The most exquisite girl I could ever imagine actually wanted to spend the rest of her life with me!

A month earlier, I had stood outside a building at Onderstepoort, with the rest of my classmates, waiting to hear if I had passed my final exams. There was a meeting in progress while the faculty deliberated the final exam results, which had just been completed. The door had swung open, and the faculty members streamed out; all of us, with bated breath, stared hopefully, if rather nervously, at them as they approached us. One of the lecturers, I can't remember who walked straight up to me, stuck his hand out and said these magic words; "Congratulations, Doctor du Toit, welcome to the veterinary profession".

All those hours of lectures and study, all those hours of quizzing each other, all those hours wholly dedicated to one thing, to fulfil the passion that had been awakened in me some seven years before on a cold winter's night on a station in the heart of the Karoo. That night I had stood on the station platform ready to embark on leaving for my boarding school, Grey High in Port Elizabeth, listening to the hiss of steam from the engine, the banging of doors and shouted farewells, so familiar to me by then. Growing up on a sheep farm nearby, I would have loved to go farming but had an older brother who would take over the farm. I had not decided what to do after school; all I wanted was to be out in the open working with animals. There was a contemporary of mine that evening on the train, Peter Belonje, whose father was the Veterinarian at Grootfontein Agricultural College. I overheard my father say to him, "So are you going to become a vet like your father"? Pete answers, "Oh yes, definitely". My dad then said to him, "I wish you would persuade Ian to do that too".

As the train gathered momentum, leaving the twinkling lights of Noupoort behind, gaining speed and thrumming out a rhythm with its wheels pounding along the tracks and occasionally a long whistle in the distance as it rounded a corner, I found myself filled with a tremendous joy of discovery. "That's what I want to do". "That would fit me perfectly". As the train picked up more speed and the smell of soot tainted the air, the rhythm said "yes, yes, yes," and a passion was born, which still burns in me today.

It had been an influential seven years from then, so much changed, so many challenges and obstacles, but also so many high points and joys. There is one incident that I want to share, which has stayed with me to this day. I did my first year at Pretoria University and applied for entry at Onderstepoort. Although the selection was strict, that year, they would take 30 students for the first time; I had a sort of calmness, sensing that I would be selected. Back home on the farm, as the year 1956 dawned, I waited eagerly for the letter from the faculty to say whether I had been accepted. I perused the post as often as we could get into town. Eventually, the letter came. I opened it with trembling fingers, still quite hopeful and read the opening sentence: "I regret to inform you your application for entry to the veterinary faculty at Onderstepoort has been unsuccessful….." With some further words of encouragement to try again. I was falling; I was plummeting down and down, like someone who has just done a bungee jump into a black pit. Turndown could not be happening to me; I had been so confident! Now What?

I stumbled out of the house into the Karoo veld and walked and walked, climbing the little 'koppies' and sitting on the 'kranse' absently watching the dassies sunning themselves in the glaring summer heat, with heat waves shimmering off the hills in the



distance. There was only one thing on my mind: 'I must ask God to change this, to open the door'. My grandparents were strong Christians, so I did not doubt God existed and could change anything if you could somehow persuade Him.

For seven days, I wandered around the Karroo veld, saying over and over again, "Dear God, please make it possible for me to go to Onderstepoort". Then on the eighth day, it happened. A telegram arrived. "We are pleased to inform you that there has been a cancellation, so you now are included in the second year intake". Tears of joy flowed freely down my cheeks. "Thank you, God, thank you"! I did not doubt that He had orchestrated this, and I still believe that to this day. It was one of many reminders of His reality which only bore fruit later.

Standing outside the faculty building then, I could almost not believe it; I had passed and was now ready to be launched into the real world. That was a month ago, and now, this beautiful girl, with whom I had tumbled and tumbled, head over heels into love, actually wanted to spend the rest of her life with me! If I had a ten-gallon cup, it would have been pouring over with absolute joy.

The year 1960 rushed on. I started a job with a well-known equine practice in Cape Town, which I have described previously, but was soon totally disillusioned. In the meantime, Emily moved to Cape Town to be near each other, so I spent enough time with her to really bond. The door opened two months later for me to start a practice in Swellendam, all described elsewhere, as Emily returned to Grahamstown, and we could plan our marriage for early 1961.

But I want to stop here and draw aside a curtain hiding a throbbing reality that struck me like the light flashing light on a racing ambulance several years later. As I reflected on all these events and much more similar, in the light of my coming into a relationship with the Lord, I realized His continual Divine hand on my life:

***The answer to prayer for my entry to Onderstepoort. He always wanted me to go but wanted me to realize it was His hand that led me.***

***Then the whole way, my meeting and subsequent wooing of Emily went, but none more significant than the phone call she made to me at the end of 1959. As I explained last time, I had broken off my relationship with her, although I was heartbroken and had decided that that season of my life was past and closed. As we approached our last exam, with all the other years have gone home, I was on my way to a wedding on the Saturday just after lunch. The phone of the lonely abandoned phone booth rang just as I passed. Stepping inside the voice, I had missed so much said to me, "I am on Pretoria station, will you come and fetch me?"***

No, she wasn't there but used this to gauge my reaction to her trying to make up with me again. Now, let me show you how the timing of this call had to be within 30 seconds for me to have got it. A long-distance call took an indeterminate time to come through, so the timing was random. Walking from my room, if that call had come 30 seconds earlier, I would not have heard it and 30 seconds later, I would have been out the front door.

On top of that, I recently discovered that Emily had kept the page of notepaper on which I had written my address when I left



Grahamstown at the beginning of the year. It simply said, 'Ian du Toit, Students Residence, Onderstepoort and then the telephone number'. Emily had no other contact details for me and would not have found me if that call had not been answered with that split-second timing, and a week later, I would have been gone forever out of her life. Coincidence? Some people would insist. Just as some people can believe that this whole wonderfully complex universe we live in just "happened by chance".

As I look across the room this afternoon at the sun falling on that same beautiful face, sitting relaxed in an armchair, her mind ravished and depleted by Alzheimer's, I see her staring at me, which she spends a lot of time doing. Those green eyes, the gold flecks still there, but the vitality has gone. The personality that made a room come crackling alive when she walked into it now mellowed to just gallons of soft love for everyone around her, especially me. Love, not only from her beautiful nature but also from the Holy Spirit who still fills her heart. Ten years have slipped by since the diagnosis was made. At first, I was devastated and grieved the significant loss of what I perceived we had. Then someone at church one day said to me, "Ian, have you ever thought that you are God's gift to Emily"? Those words changed everything, it moved my focus from myself and my loss, and now it enabled me to see what I am doing not as an arduous task, but a God-given opportunity to serve her and, in so doing, serve and bring glory to Him. With all this, I regard it an absolute privilege to be able to love her through this dark valley, with the help of the One who said, "though you go through the valley of the shadow of death, there I will be with you".

Sixty years have passed since that exciting period in my life, but it remains as fresh as if it happened yesterday in my recollection. V



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# **Life plus 22** without parole




**Mike Lowry**

Mike Lowry has been in veterinary practice for "life plus 22" years. In this column, he shares his experiences and opinions.

Finally, this is the last submission for this year. Another year has flown by, and in looking back, it has been a year with more negatives than positives, unfortunately.

I wouldn't say I like talking about politics, but one must acknowledge the country's downfall. Mass unemployment is rife, and then we got Covid to add to the problems. The looting that occurred in Natal and Gauteng was unprecedented, so was the police force, who offered no help at all.

Then the elections that were needed to get change going were only supported by 33 % of the population. And these are the votes that the country was prepared to go to war for in the 1980s!

Life changes without forewarning! The veterinary profession has had its share of problems, and being a member of the STRESS Group has undoubtedly had its challenges. There have been far more calls than before, but fortunately, they have been manageable – really just a lot of financial problems and the social problems that follow. Also of interest to me is the change that is evident in the private practice industry around me. Practices are springing up on every corner, resulting in the law of supply and demand coming to the fore. Price cutting, specials and the "Black Friday type" advertising are all very active.

Not that long ago, this would have resulted in the Council visiting you and requiring an explanation!Is it good or not? Some years ago, the Human Science Research Council studied people's attitudes to various professions. Interestingly, the Veterinary profession was held in the highest regard of all professions, and one evident aspect was the trust people had in their vets. I question if that is the case today! Many people now regard vets as the "rip off" specialists. Founded or not is not the point; that perception is far from desirable; if a pet owner has to consider whether or not to take the pet to the vet because of the fear of being ripped-off, it is the animal that suffers. See the case of an othaematoma that an animal owner took in and was told to leave it alone, no drainage and a final account of R2500. The vet told the owner she could expect the dog to end up with a cauliflower ear. Dogs are dogs, not rugby players, which is part of the risk for continuous damage to the ear cartilage.

Technological advances, in certain instances, have been fascinating. The recently reported genetic manipulation of the porcine genome to make the kidneys more readily suitable for human transplantation makes for exciting reading. One can only imagine what advances are still to be made.



I took a trip to RamSem in Bloemfontein to see their semen sexing operation. There is vast scope in this direction for stud breeders who want to increase stock numbers or improve genetics in one giant step.

The reason for my interest in semen sexing is that I have been doing consultatory work in Gabon, in the North-west corner of this great continent. This ranch of 650000 hectares was a completely new experience. The area is full of Trypanosomes and every tick-borne disease imaginable.



The "indigenous" cattle are the nDama, an animal that is very Jersey like in size and colour except that today's Jerseys are far larger – nearly twice the size. This little bovine is exceptionally fertile, with many of the animals have had 12 or 13 calves in conditions far from favourable.

Further and the most crucial aspect is that they have a gene that makes them Trypanosome tolerant, not resistant. The animals are all injected twice annually to decrease the load, and they then do relatively well. Attempts have been made to crossbreed them with other indigenous breeds, but all these have been unsuccessful as the tolerance gene is lost in the first cross.

This ranch can carry 44000 breeding cows and has only got 3000, and there is no chance of buying in females. And this is the reason for wanting sexed semen, to increase this herd as quickly as possible.

Another concerning aspect of this year has been the decline in the availability of Onderstepoort vaccines. How is it possible that there is no Horse Sickness vaccine available? Further, the quality of many of the vaccines that have been produced for years is being questioned. A personal experience with the powers that be at the Vaccine production unit left everything to be desired.

I have purchased the Lumpy Skin vaccine from them for the last 45 years, and never a single problem. I then bought a batch to do my herd, and ten days after vaccination, the cattle started showing typical signs. But the reaction was highly severe, and two stud bulls died. I contacted the OP powers that be, and they arrived on the farm very rapidly. A lot of chatter and promises were made. They were to return to collect more samples—a very satisfactory reaction except that they never returned, and I have not heard a word since.

But to end on a high note. Some three years, ago two of my clients – both in their early 40's and with children that were teenagers left the country saying that they worried about their children's future and education. Both went off to the UK.

Well, recently, both families returned to South Africa, and both returned with the same story.

The reasons we all know very well. You can take a person out of Africa, but you will never take Africa out of the person.

Have an excellent Festive Season.



# Dagboek • Diary

## General 2021 / 2022

- **A Course in Human Ethics and Animal Rights.**
  Ongoing and online.
  Completion time: approximately 8 hours.
  Contact: admin@animalvoiceacademy.org
  Website: http://animalvoiceacademy.org

- **Acupuncture – Certified Mixed Species Course.**
  Ongoing and online.
  Info: Chi University: southafrica@tcvm.com or https://chiu.edu/courses/cva#about

- **Certification in Clinical Integrative Canine Rehabilitation (Through College of Integrative Veterinary Therapies).**
  Ongoing and online.
  Contact: enrolment@civtedu.org OR www.ahah.co.za/civt/

## February 2022

- **Northern Natal Congress.**
  05 - 06 February
  Venue: Battlefield Lodge, Dundee
  Info: Vetlink, 012-346-1590, www.vetlink.co.za

## March 2022

- **Wildlife Group of the SAVA Congress.**
  10 - 12 March
  Venue: Gauteng - TBC
  Info: Vetlink, 012-346-1590, www.vetlink.co.za

- **South African Association for Laboratory Animal Science (SAALAS)Congress.**
  28 - 31 March
  Venue: North-West University, Potchefstroom
  Info: Vetlink, 012-346-1590, www.vetlink.co.za

## May 2022

- **RuVASA Congress.**
  08 -11 May
  Venue: The Boardwalk Hotel, Port Elizabeth
  Info: Vetlink, 012-346-1590, www.vetlink.co.za

## June 2022

- **SAEVA Congress.**
  02 - 04 June
  Venue: Gauteng - TBC
  Info: Vetlink, 012-346-1590, www.vetlink.co.za

## July 2022

- **14th International Polychaete Conference.**
  10-15 July
  Venue: STIAS, Stellenbosch
  Info: https://savetcon.savetcon.co.za/ipc14/

## August 2022

- **Free State & Northern Cape Branch Congress.**
  13-14 August
  Venue: to be confirmed
  Info: www.savetcon.co.za

## September 2022

- **4th International Conference on Parasites of Wildlife.**
  11-15 September
  Venue: Skukuza, Kruger National Park
  Info: http://savetcon.savetcon.co.za/icpow2022/

## October 2022

- **Oranje Vaal Branch Congress.**
  14-15 October
  Venue: Stonehenge River Lodge, Parys
  Info: www.savetcon.co.za

- **11th Biennial South African Veterinary and Paraveterinary Congress and Awards.**
  25 – 27 October
  Venue: Emperors Palace, Kempton Park, Gauteng
  Info: Corné Engelbrecht, SAVETCON, 071 587 2950, corne@savetcon.co.za



Wildlife Group of the
South African Veterinary Association

# WILDLIFE CONGRESS 2022

## 10 - 12 March 2022 | PRETORIA | HYBRID EVENT

## Call for Abstracts

www.bit.ly/wlg21-abstracts

Deadline: 6 December 2021



### TOPICS

**IMMOBILIZATION UPDATES, AIR AND OTHER TRANSPORT, DISEASE AND INTENSIVE MANAGEMENT, OR ANY OTHER TOPIC OF INTEREST TO THE WILDLIFE VETERINARIAN**

The Wildlife Group of the SAVA conference will be held over three days, Thursday, Friday and Saturday, 10, 11 and 12 March 2022 in Pretoria, South Africa. The venue will be confirmed, but will be close to Onderstepoort. The themes will focus on Immobilization updates, air and other transport, disease and intensive management but any paper of interest will be considered. **PRESENTERS MAY PRESENT REMOTELY IF THEY CANNOT ATTEND IN PERSON.**

Authors wishing to submit abstracts must be able to present on any day of the congress.

Deadline for abstract OR finalised title: 5 December 2021

Full manuscript/Finalised abstract: 1 February 2022

- The Congress committee of The Wildlife Group of the SAVA invites abstracts for presentation as free communications as well as case studies and research results. Presentations can be either as oral presentations or posters.
- Papers reviewing recent advances, or relating to research into matters concerning relevant topics that may be of interest to wildlife veterinarians will be considered.
- Practicing veterinarians are encouraged to submit abstracts.
- Full manuscripts will be given preference should oversupply of submissions occur

GUIDELINE TO AUTHORS:

The abstract must be a complete but concise synopsis of the content that will be both informative and useful to the potential audience. The format for the abstracts is flexible, but should contain a clear objective, methods and results (where applicable) and a logical conclusion. Two independent people will review abstracts and successful authors will be notified within two weeks. Submitters must accept the terms and conditions for speakers. Abstracts that do not comply with the following format will be returned to the authors for corrections:

1. Must be in English and typed in MS-word format. Abstracts may not exceed 350 words.
2. Script must be in 12 Times new Roman font, with single spacing, single column and left justified.
3. Must clearly indicate the author's name. Write names of authors in the order of last names and asterisk (*) the person who will be the presenter.
4. Must clearly indicate the organisation (name and location of institution, clinic, practice etc). If the affiliation of co-workers differs, indicate the names and affiliations by corresponding numbers (Superscripts).
5. Must contain a list of references.

Abstracts can be submitted on this link: www.bit.ly/wlg21-abstracts

BROUGHT TO YOU BY THE WILDLIFE GROUP OF THE SOUTH AFRICAN VETERINARY ASSOCIATION

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