NEWSLETTER FEBRUARY

In this newsletter:

- Pronking springbuck
- Animal Crime Scene
 and Evidence
 Handling course
- The tick season is upon us...

Dear clients,

We hope you are well and that you are enjoying our green Namibia! What a pleasant sight for sore eyes! In this newsletter we tell you more about pronking springbuck, and we discuss ticks. With the good rains, the nasty 'goggas' and ticks also come out. We give some information about ticks, and discuss what you can do to minimize the tick burden on your farm. We hope you enjoy the newsletter!

Kind regards, the Wildlife Vets Namibia team

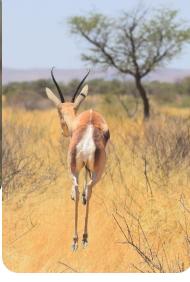
PRONKING SPRINGBUCK

When the rains started coming, many Namibians jumped and danced in the rain! An animal that has finetuned his classic jumping style is of course the springbuck!

Pronking, also called stotting, is a particular behaviour of ungulates and deer species, whereby they jump up in the air, lifting all four feet off the ground simultaneously. Opinions do differ if pronking and stotting are the same, some say that pronking is a type of stot. Pronking is a jump in the air, with the back arched, head low and feet close together, while stotting is a jump in the air with a straight back, head up and feet apart. Up to you which term you want to use



Pronking/stotting springbuck. Photo up © <u>Yathin sk</u>. Photo right © M. Bijsterbosch



There are a couple of theories of why animals like the springbuck do this. Some say that they do this to advertise their fitness and agility to potential predators, its like showing off that there is no point in chasing them. If many springbuck in a herd pronk, it might make it more difficult for a predator to focus on one animal. It can also be a warning to other members of the herd that a predator is close by, or to signal the predator that he has been seen. There is some evidence for the latter, as cheetahs abandon more hunts when their prey stots, and when they do go in for the hunt, a stotting prey is less likely to get caught. It can also be that this is a display to show off fitness to potential mates, or perhaps its just animals having a fun time? Who knows \bigcirc



Springbuck have a dorsal crest, when they start pronking, sometimes a bunch of white hairs stand up and become visible. In this dorsal crest are also glands that secrete a sweet smell, a bit like vanilla. Normally the crest is stored in a blind fold of skin, forming a pouch, and when they start pronking, the hairs come out. This pouch is called a marsupium - hence the Latin name for springbuck is 'Antidorcas marsupialis'. The reason for this pouch and the white hairs are not yet fully understood.





ANIMAL CRIME SCENE AND EVIDENCE HANDLING COURSE

NOTE REGARDING THE ANIMAL CRIME SCENE COURSE: The name of this course is misleading! Every crime, irrespective of its nature (house breaking, stock theft or rhino poaching) has essentially the same elements to it (the scene, a victim and the perpetrator). In theory a perpetrator enters the scene and inadvertently leaves traces (evidence) behind while removing something (meat, stolen goods etc.) things from the scene.

A crime scene should be processed in such a way that minimal damage and contamination (e.g. walking over foot prints or picking up tools etc. left behind by the perpetrator) is done to the scene while the evidence is collected and handled in the best possible way to ensure that it can be used in court.







ANIMAL CRIME SCENE & EVIDENCE HANDLING

One of the biggest threats to both wildlife and livestock farmers is poaching and stock theft. When such a crime has been committed, it is important that the correct investigative approach is taken as soon as possible. Here is where a few problems come in... Due to logistics, it sometimes can take days for an official

to come out. However, in outdoor crimes it is important to quickly protect the crime scene and possible evidence. Another issue is that when a crime has been detected, people who are first on site often immediately start looking everywhere, thereby accidently destroying important evidence, and possibly even contaminating the crime scene, making themselves a suspect! Therefore we designed this 2.5-day course, in where we will discuss the proper approach to, and handling of a crime scene and evidence.

WHAT?

In the mornings there will be lectures, topics include e.g. DNA, how to approach and handle a crime scene, types of evidence, forensic photography, documenting findings, maintaining the chain of evidence, body language and court cases. In the afternoons we do practical training on photography and evidence handling and collection. On the final day everything comes together, where we investigate a 'crime scene' from A to Z.

WHO?

This course is designed for people that may become involved in crime directed against wildlife and/or livestock, such as farmers, managers, anti-poaching units, game rangers, reservist police officers etc.

Course fee: N\$2840, Accommodation: N\$ 1500 for 2 nights Kifaru Bush Camp (Outjo district) 13 - 15 May 2022 Course fee: N\$2700 Accommodation:

If you want to receive the course outline with extra information, or if you want to sign up for the course, contact us on:



mariska@wildlifevetsnamibia.com 081 382 8473 (+31 6 4369 3095 www.wildlifevetsnamibia.com



VENUES

Etango Ranch (Windhoek district) 04-06 March

incl. training from professional photographer Dirk Heinrich.

N\$ 1300 for 2 nights

All prices are excl. VAT. The course fee is inclusive of lecture material (you will get the PPT's and extra useful material in a PDF form on a USB stick), the lectures itself, use of the facilities, and the practical training including use of materials. Accommodation includes all meals.

Our course will teach participants (from rhino owner to stock farmer, police reservist or neighbourhood watch member) exactly how to approach and handle a crime scene to achieve the goals listed above.

The more people becoming involved and working together, the bigger the chances are that we will curb the crime wave that hardly leaves anyone untouched.

Interested? We still have space for the Etango course, 04-06 March!

Etango Ranch is conveniently located near Windhoek, and professional photographer Dirk Heinrich will teach you all the ins and out of making clear and proper photos!



TICK SEASON IS UPON US...

With the widespread rains over Namibia, the grass is growing and it is a time of plenty, but as the saying goes, "every rainbow has its rain"! The rains not only allow grass to thrive, it also creates the ideal circumstances for parasite problems (both worms as well as ticks). In the past couple of weeks we have been called out to treat several animals with severe tick infestations.

On one farm the main complaint was that most of the young sable suddenly turned lame. We darted several youngsters and found the same problem with all: Ticks had nestled their way into the interdigital space (skin between the hooves) and caused problems.







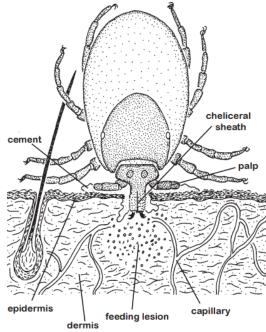


Photos showing ticks in the interdigital space between the hooves of several young sables, and the damage they can do. © M. Bijsterbosch

Before we go deeper into the sable feet issues, lets first do a quick basic 'ticklesson' Ticks can be divided in two main groups; the Argasidea or argasids, which are called the soft ticks (no hard plates on their bodies), and the Ixodidae or ixodids, also called hard ticks. In the whole world are at least 866 different species of ticks. Amongst the Ixodidae we differentiate between species with short mouth pieces and those with long mouth pieces. It is the latter group that is most difficult to remove from a bite and causes most damage to the skin.

Ticks are parasitic; they feed on blood from animals (their hosts). Some tick species are masters in ambush; they live in open environments, crawl onto vegetation and wait until they host comes by. Once the host is close by, the little forelegs grab onto the hosts, and the tick crawls over the skin to find a suitable spot to attach. Other species are active hunters, and move across the ground when hosts are nearby.

Once the tick has found a host, their mouthparts penetrate into the skin and secrete a sort of cement, thereby 'gluing' the mouth to the skin of the host. The chelicerae (part of the mouth) has sharp claws, and cuts a hole in the skin and the superficial (capillary) blood vessels. This forms a feeding lesion, from where the tick drinks the host's blood.



The feeding of a female hard tick, attached to the skin of a host © <u>A. Walker</u>



The ticks responsible for this particular problem are of the *Amblyomma* and *Hyalomma* genus. In lay-man's terms these are often called the bont tick, or in Afrikaans bontpoot bosluis respectively. For more information on ticks and their identification, have a look at this interesting book: <u>Ticks of Domestic Animals in Africa: a Guide to Identification of Species.</u>



On the left you see an Amblyomma species, whereby the top part is 'bont'. On the right is a Hyalomma species, also called bontpoot bosluis © <u>A. Walker</u>

The bont tick has bands on the legs with a dark body. They have a long mouthpiece, and when they bite, they can cause necrosis (death of body tissue). The bite-spot can be extremely painful. This is what happened with the sables... The sables that we treated were all lame, and some even hardly could stand on the one leg. Interestingly, it only affected the young sables. We believe that adult sables might develop a kind of immunity (to some degree) against the toxic substances ticks excrete when they bite. The sables were treated with a long-acting antibiotic, painkiller, a vitamin/mineral booster and received a pour-on against ticks and flies.

Biological tick-control

Animals do have their own ways of getting rid of ticks. Antelopes groom themselves for example, they slide their incisor teeth through the hairs to get rid of ticks. As the animal gets older, their incisors wear down, leaving bigger gaps between the teeth. This reduces their ability to use the teeth to get rid of ticks. As a result, older animals will be more susceptible to tick infestations. Rhinos for example will use mud baths and rubbing posts to get rid of ecto-parasites.

Birds such as the cattle egrets (*Bubulcus ibis*), yellow-billed oxpeckers (*Buphagus africanus*) and red-billed oxpeckers (*Buphagus erythrorhynchus*) are predators of ticks. Starlings and guineafowls are also known to eat ticks, although this is not their main food source. Regular bush fires are considered to be an important tick-



Young impala ram grooming itself
© M. Crowther

control. However, the fire must be slow, hot and consuming the lower vegetation. On the opposite side, fires can obviously have a negative effect on the nutritional value of the surviving vegetation.

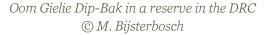


Chemical tick-control

Chemical tick-control in wildlife can be done in several ways:

Feeding areas with tick-poison

A system that works well is 'Oom Gielie Dip-Bak' (named after the farmer who came up with the idea). On the farm several feeding areas with salt/mineral licks can be placed, and as the animals eat from this, their throat rolls over a bar which goes through a special holder with tick-poison. Important to keep in mind is that the tick-poison is regularly checked and refilled. When it rains, the tick-poison will be diluted, making it less effective.



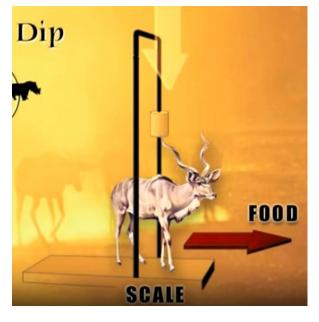




When you use pour-on tick treatment on animals, make sure they have a 'Oxpecker-compatible' label! Oxpeckers, are insectivorous and carnivorous birds that eat ectoparasites off large animals. They can consume 100 engorged female ticks, and more than 12,000 larvae per day. Sadly, during the 50's farmers in Africa started using anti-parasitic poisons with arsenic and organo-chlorine for their cattle, which killed not only the parasites, but also the oxpeckers. This led to a big decline and numbers and their range.

Self-application via pressure or light sensitive mechanisms

With these methods the animal is 'forced' to walk through a narrow entrance to for example water or food (can make use of game trails or boma entrances/exits). The animal then steps on a pressure plate, or interrupts a light beam, which activates the spraying of tick-poison. You can watch a video about one of these dip systems here: Scorpion Dip System. The disadvantage of this system is that it is difficult to guide animals to a narrow entrance, especially when they are not used to it. This system is best done when animals are boma-trained, and are used to eat in a boma.





Example of a selfapplicating dipping system © <u>P. van Niekerk</u>



Have dipped cattle/goats walk through the area

Having cattle, goats or sheep that are regularly treated with tick-poison walking through an area can make a huge difference in tick levels. As an example, on a game farm with treated cattle in South Africa, the kudus had on average 19 Amblyomma ticks, whereas on the game farm next door (no treated cattle) the average burden was 1318 (De Deken, Horak, Madder, Stoltsz (nd) Tick Control)! The cattle/goats/sheep should be treated with the tick-poison and should ideally be herded through areas where the tick burden is highest or, where the highest density of tick-infested game is found. It will be most effective during the wet summer months, when the ticks are most abundant. Besides the dipping, special acaricide-impregnated tail- and ear tags can be used on the cattle to be more effective.

Other ways

- Medication in food items not a viable option in extensive situations, since dominant species and individuals will get most of the medication, while the subordinates (and often weaker ones who need the medication) get nothing.
- ♥ Vaccination the vaccines are still in an early stage, and not yet for all tick-species. Tests showed that immunity does not last long, meaning that multiple vaccinations must be given throughout the
- Immobilization and injecting of long-acting anti-parasiticides. An option that works well as the animal can receive the correct dosage and additional medication if needed, however it is expensive and time-consuming.

Darting with anti-parasiticides – In most cases not a viable option, as for bigger animals you would need a high dose, which won't fit in one dart. The animal would have to be darted multiple times to get the right dosage (under-dosage leads to resistance). Also, animals will become skittish when they

are often darted.



Duncan applicator – practical in smaller camps, but not very practical in extensive situations as you would need multiple Duncan applicators.

Duncan applicator © Highlands Wilderness

DR ULF TUBBESING P.O. BOX 50533, BACHBRECHT, WINDHOEK +264 (0) 81 128 3050 ULFT@AFRICAONLINE.COM.NA

MARISKA BIJSTERBOSCH +264 (0) 81 382 8473 +31 (0)6 4369 3095 (WHATSAPP) MARISKA@WILDLIFEVETSNAMIBIA.COM

WWW.WILDLIFEVETSNAMIBIA.COM FACEBOOK: WILDLIFE VETS NAMIBIA YOUTUBE: WILDLIFE VETS NAMIBIA

