

A Brief Introduction to Combatting Snare Poaching

Introduction

This guide provides a very brief theoretical background into managing the poaching of game animals in protected areas and game reserves, using snares and other similar traps and devices. It will hopefully equip the reader to carry out their tasks on a snare patrol in a safe and effective manner.

Snares pose a significant threat to wildlife across the globe, and the data seems to suggest that the use of these devices are increasing at a significant and alarming rate. In some sections of the world-renowned Kruger National Park, rangers remove 200 or more snares per week. Without regular snare patrols in these protected areas, wildlife numbers would surely plummet, leading to numerous other negative impacts, both from an environmental, as well as an economic perspective.

Removing snares is a highly rewarding exercise and it plays a very important part in conservation. It is still one of the best ways to counter this cruel way of hunting. However, it is not an easy task, and can also be a dangerous undertaking as there always remains the possibility of encountering hostile poachers or dangerous game whilst on a snare patrol.

It is vital that all participants are well informed and prepared in order to stay safe and excel in their task. Remember: Knowledge is power!



Top: A ranger poses with a snare found inside a conservation area. These snares are often set on well-used game paths and constructed using steel cables. At this size, they are usually intended for the larger game species such as Buffalo and Hippo.

What is Poaching?

Poaching can be described as killing, trapping, capture, removal or being in possession of any product of fauna or flora without the valid permits or permission. Poaching is in effect the illegal hunting of fauna and flora. It occurs in many forms throughout the world and is of particular concern in protected areas. The motivation behind poaching will usually be for financial gain, or for subsistence (food, wood for heat or cooking etc.).



Top Left: Most people are familiar with the crisis Rhinos are facing. Unfortunately, many other species are also targeted for various reasons and using various methods.
Top Right: A poacher drying meat on lines at his camp. Drying helps with preserving the meat and makes it easier to carry a larger quantity out of the protected reserve.

What are the levels of poaching?

Poaching can generally be classed or grouped into three major categories, or levels;

- Subsistence poaching
- Commercial poaching
- Syndicate poaching

All levels of poaching are equally critical as they are often interlinked, and intelligence passes through all three levels. All pose a significant threat to our natural heritage, and all should be considered armed and dangerous. Subsistence poachers may often progress to higher levels of poaching. Being the boots on the ground and possessing the skills needed, they will often be employed and supplied by Syndicate poachers, who tend to mostly work behind the scenes. Although on snare patrols we will mostly be dealing with subsistence level poaching, we will briefly discuss the various levels to give you a general understanding.



Top: A ranger holds up a gin trap that claimed the victim's foot. Gin traps, or "slagysters" as they are locally known, are very cruel devices that can be harmful to both animals and humans. Animals have been known to chew off their trapped limbs in order to escape from gin traps.

Subsistence poaching

This is a person that usually hunts/traps for himself and his family. They are often individuals from in and around the targeted wilderness area.

- This is usually the work of the lone, impoverished poacher that hunts for food (bushmeat) and other resources using mainly traps, snares and basic weapons like spears and machetes (panga).
- May sometimes have an accomplice or two.
- May sometimes use hunting dogs.
- Often lives in the surrounding areas of his poaching position and will know the terrain, habitat, infrastructure, routines, and resident species remarkably well, and can be highly skilled in bushcraft.
- They may indiscriminately set snares over a large area to increase their success, coming back later to see what they have caught, often under the cover of darkness.
- Targets mostly meat species, but very opportunistic.
- Wood and other plants, particularly those of medicinal importance (muti-trade) are also often harvested. Hardwoods such as *Combretum* sp. are often poached for wood.
- May sell any excess bounty.
- Often responsible for large amounts of meat being left behind to rot and waste as they only take what they can carry.
- They usually pose little threat to anti-snare patrols, choosing to either avoid or flee rather than put up a confrontation, but may carry various poaching weapons such as knives, machetes/pangas, spears, and axes. Caution is always advised.
- May often supply intelligence to commercial or syndicate poachers. May often progress to higher levels of poaching or start supplying commercial or syndicate poachers.



Top Left: Bushmeat confiscated at a poacher's camp. **Top Right:** A hare caught in a snare. Unfortunately scenes like these are becoming a very common sight in our greenbelts and natural areas. **Bottom Left:** A pile of firewood collected by a poacher within a nature reserve. He fled the area after noticing patrol members. **Bottom Right:** A Grey Duiker caught in a snare. From the trench it has dug with its legs, it becomes apparent how the animal has struggled trying to free itself.

Commercial Poaching

- Often times much like the Subsistence poacher, but much more sophisticated.
- These poachers usually poach in large volumes in order to supply market and are primarily motivated by financial gain.
- Their illegal bounty may often be sold through legitimate outlets e.g. Butcheries and other meat markets.
- May operate alone, or in small groups.
- Makes use of traps, snares, poison, as well as a variety of weapons such as firearms.
- They are usually rather well-equipped, sometimes having telescopic sights, night vision spotlights, radio communications and vehicles.
- Will poach any fauna or flora that may have monetary value.
- Often targets larger game such as Kudu, Wildebeest, Giraffe, and Buffalo for meat, but are opportunistic.
- High-value game such as Sable and Roan are also targets and may be stolen as live specimens and sold off.
- Rare flora with high monetary value such as certain succulents and cycads may also be targeted.
- May pose significant danger to anti snare patrols.



Top Left: Commercial poachers often supply the thriving bushmeat markets. **Top Right:** A large haul of illegally collected indigenous plants confiscated by police. Plant poaching often goes unnoticed due to it seeming benign, but some species are facing severe pressure in the wild. **Bottom:** Kudus poached for likely resale on the meat market.

Syndicate Poaching

- Driven by significant financial gains.
- Sophisticated, organized, very well-equipped, and usually linked to local and international organized criminal groups.
- Well organized intelligence network
- Prefers to work behind the scenes, and often employs Subsistence and Commercial poachers as the boots on the ground.
- Makes use of an assortment of weapons such as automatic and semi-automatic rifles, dart guns, and may even utilize helicopters and other vehicles in operations.
- Specializes in poaching animals and plants of high monetary value, such as rhino, pangolin, lion and elephant.
- Rare Cycads and succulents with high monetary value are also targets.
- Usually professionals, frequently with a bush, military or Para-military background and training.
- Often makes use of bribes. Especially in countries where corruption is rife.
- May even use intimidation or murder in order to facilitate business.
- Poses significant danger.



Top Left: An intercepted shipment of ivory. Elephant ivory is in high demand, particularly in many of the Asian countries for use as ornaments amongst other things. **Top Right:** Two boxes of confiscated Abalone or Perlemoen as it is locally known. Abalone is a high value commodity, and is often bartered for narcotics, which are then sold on the street. The two industries often go hand in hand **Bottom:** All Pangolins are under severe pressure from poaching and command high prices on the black market. Their scales, which are composed of keratin (same as your fingernails, and not unlike rhino horn), are believed by some to have medicinal and other magical properties. There is no modern science to support these claims.

Table indicating various species commonly targeted, and their uses.

Species	Product
Baboons Savanna	Muti trade
Birds of prey	Muti trade and live sale
Blesbok	Meat
Bontebok	Meat
Buffalo	Meat and live sale
Burchell's zebra	Meat and skin
Bushbuck	Meat
Bushpig	Meat
Crocodile	Meat, skin, eggs, and live sales
Damara Dik-dik	Meat
Duiker blue	Meat
Duiker grey	Meat
Duiker red	Meat
Eland	Meat
Elephant	Ivory
Gemsbok	Meat
General birds	Muti trade and live sale
Giraffe	Meat
Grey Rhebok	Meat
Grysbok Cape	Meat
Grysbok Sharpe's	Meat and retail live
Hartebeest Lichtenstein's	Meat
Hartebeest red	Meat
Hippo	Meat skin and ivory
Hyaenas	Muti trade
Impala common	Meat
Jackal	Muti trade
Klipspringer	Meat
Kudu	Meat
Leopard	Skin and Muti trade
Lion	Skin, bones, live sale, Muti trade
Monkeys vervet	Muti trade
Mountain reedbuck	Meat
Mountain zebra cape	Meat and skin
Mountain zebra	Meat and skin
Hartmann's zebra	Meat and skin
Nyala	Meat
Oribi	Meat
Ostrich	Meat
Pangolin	Meat, muti trade and scales
Plants	Muti trade and live sale
Reedbuck common	Meat
Rhinoceros black	Horn
Rhinoceros white	Horn
Roan antelope	Meat and live sale
Sable antelope	Meat and live sale
Small cats	Muti trade and live sale
Springbuck	Meat
Steenbok	Meat
Suni	Meat
Tsessebe	Meat
Warthog	Meat
Waterbuck	Meat
Wildebeest black	Meat
Wildebeest blue	Meat



Top: Snares removed from a protected area on display in the ranger camp to create awareness about the devastation this form of hunting causes. **Bottom:** A Kudu that was caught in a snare in the Dinokeng Game Reserve.

All suspected poachers should be considered armed and dangerous, and members conducting a snare patrol should never attempt to confront any suspected poacher/s. Please report suspicious activity or persons to your safety officer or team captain and await instruction.

What are Snares?

Snares are exceptionally cruel devices, usually constructed with nylon, cable, or wire, anchored to a sturdy object such as a tree trunk, which is then strategically sprung in a noose with the intention to catch a passing animal.

The snare works by tightening around the victim's neck, body, or limb until there is no escape. It is often set at the height of the intended victim's head, and thus if all goes according to the plan, the animal dies of asphyxiation. The carcass or parts thereof is then retrieved by the poacher at a later stage, often under the cover of darkness. **Because the likelihood of the poacher returning to where he set snares is high, it is very important to remember that you are always to be on high alert while conducting snare patrols.**



Top Left: Snares come in all sizes and can be constructed from various materials. **Top Right:** Thousands of snares removed from a protected reserve.

Snares can inflict horrendous injuries to animals and are often the cause for a slow, agonising and painful death. They are indiscriminate killing devices, and any creature unfortunate enough to wander through may be caught. They are also able to inflict harm to animals many years after having been set and forgotten.



Top Left: A Lion that lost a limb due to getting caught in a snare. Some animals will often learn to adapt with their deformities, but many often perish after a long and agonizingly painful death. **Top Right:** An elephant that succumbed to an infected snare wound. **Bottom Left:** A Lioness that got caught with a snare across the head. **Bottom Right:** A Zebra with a horrendous snare injury. The snare can still be seen dragging along with the animal.

The Impact of Snare Poaching

Being so easy and cheap to obtain and set up, snares pose a significant risk to protected areas across the world. Poachers will usually set multiple snares in an area to increase their chances of success, and it is therefore imperative that regular and thorough sweeps are performed. It is often the case that where one snare is found, there will be others close by. Their availability and ease of use have led to wildlife numbers plummeting in many areas as the need for protein sources grow along with an ever-increasing human population. As wildlife disappears from many areas outside of protected areas, poachers are likely to focus their efforts increasingly on protected areas and game reserves. As wildlife populations decline, sustainable harvests will decline accordingly and they will become susceptible to the conservation problems associated with small population sizes (Caughley and Sinclair, 1994). The scale and apparent ubiquity of the threat posed by illegal hunting suggests that without urgent intervention to address the issue, wildlife resources will be lost across large areas of the continent, with severe ecological, economic and social impacts.



Top Left & Right: Multiple snares removed from within a relatively small area. Poachers often set multiple snares to enhance their chances of making a catch. Note the difference in age, with the older snares having a rusty appearance. **Bottom Left & Right:** Two examples of snares set on game paths. Locations frequented by game are good areas to inspect for snares.

Where And How Are Snares Set?

Snares are usually set in the following areas:

- On well used game paths, especially in areas where natural funnelling or chokepoints occurs. Poachers will often create artificial chokepoints by strategically placing vegetation to force animals to move towards their snares.
- Shady areas where animals shelter from the heat of the day.
- Drainage-line thickets, as these areas are well utilized by game.
- Near dams and other sources of water frequented by animals.
- On fence lines where animals cross or pass underneath



Top Left: A snare set on a road. Note the debris placed to funnel the quarry towards the snare. **Top Right:** A closer view of the same snare. Snares like these are often set for game birds and other small mammals such as hare. **Bottom Left:** An ideal area for a poacher to set a snare. The path is well utilized by game, there is a strong tree to anchor the snare, and there is natural funnelling due to the vegetation. **Bottom Right:** A poacher with a roll of wire in the process of setting snares inside of a nature reserve.





Top Left: A snare set in a thicket area. Snares like these are very hard to detect. **Top Right:** A snare set on a game path. This poacher used some natural material to hold up the snare, a rather common sight. **Bottom:** A snare set in a wooded area. Snares like these are usually set for medium sized antelope.



Animals caught in snares can be very dangerous! Never approach too close or attempt to free any animal caught in a snare. Report the incident to your safety officer or team captain as soon as possible and await instructions.

What to do on a snare patrol

- Stay vigilant and alert at all times. Besides the danger of encountering poachers, there may also be dangerous animals around.
- Keep track of where other members in your party is at all times.
- Keep the noise levels down. See and hear danger before danger sees or hears you.
- Look out for anything out of the norm. Any form of funnelling or chokepoints, natural or unnatural may give away the presence of snares.
- Your senses are your best friend in the bush. The smell of decay may lead you to a snared carcass. The “tsik-tsik” sound of an Oxpecker may alert you to a buffalo hiding in the nearby drainage line.
- Human footprints are not normal to find in the bush away from roads in protected areas. They often lead to snares or other poaching activities, so it may be wise to follow them.
- Keep your eyes open for any signs of human activity or anything out of place. A fresh cigarette bud, or a newspaper ‘zol’ can often give away that poachers have been in the area.
- Target areas that animals would use or congregate in. Game paths, areas around dams, and the thickets along rivers.



Top Left: A poachers 'zol' found on patrol. **Top Right:** A poacher track photographed with an item for scale. Photographing evidence like this could help secure convictions if poachers are apprehended. **Bottom Left:** A subtle sign of a poacher's presence. A Marula seed opened with a rock to gain access to the nutritious seed or 'nut' inside. **Bottom Right:** A track of a poacher's hunting dog. These dogs are often well trained, and can be found accompanying the poacher or out on its own. Dog tracks have characteristic triangular pads, and usually (not always) leave prominent claw marks. They can be highly variable between breeds.

What to do when a snare is encountered

- Stop, and at a reasonable level of volume (don't shout, but don't whisper), inform the rest of the party by calling SNARE!
- To ensure crucial evidence does not get disturbed, once someone calls out SNARE, everyone in the vicinity should stop movement immediately, until instructed otherwise by either team captain or the security officer on duty.
- Snares and any additional evidence the surrounding area might contain needs to be documented by the member of the team assigned with this task. Gathering evidence might help secure convictions in cases where offenders are prosecuted.
- The following details need to be captured:
 - *Date*
 - *Time*
 - *GPS location*
 - *Age of snare (old or fresh)*
 - *Photographs of the snare/s need to be documented before a snare may be removed. It is of particular importance to photograph the 'knot' that forms the slipknot, as these are usually done in a particular way, and each poacher has their own Modus Operandi. Three photographs will suffice; a close up of the noose, a close-up of the snare, and a scene shot.*
- Only after all necessary procedures have been completed, may the snare be removed.



Top Left: Photographs like this close-up of the knot/eye is crucial to documenting good evidence. **Top Middle:** A volunteer removes a snare by using a bolt cutter. These tools work very well on the thicker wire and cable snares. **Top Right:** Numerous snares removed from the Dinokeng Game Reserve

Useful Clothing, Equipment and Tools

- An adequate supply of water
- Sunscreen
- Hat
- Backpack
- Long trousers (this helps with the thorny environment, as well as ticks)
- Durable, yet comfortable shoes
- Durable, lightweight backpack
- Cell phone with adequate battery power
- Quality side cutters, bolt cutters, and concrete nippers all work well for snare removal. Regardless of the tool, it should be strong enough to cut steel wire and cables.
- A multitool may come in handy (Leatherman etc)
- Pepper spray (works good against people as well as animals)
- A good quality hunting-style knife is a useful item to carry along. Remember that you will not be allowed to carry a firearm in a protected area unless you are certified and authorized to do so.
- First aid kit. It is recommended that each member should carry a basic kit, and at least one full kit is needed per team.

Dangerous Game & animals

As snare patrols are often conducted in areas where dangerous game may occur, it is wise to have some general knowledge regarding the dangers of the bush. It is wise to remember that even a Grey Duiker (*Sylvicapra grimmia*) caught in a snare is able to inflict serious injury, if not worse. Therefore, any animal caught in a snare should be considered as dangerous.

When respected animals usually pose little threat to humans, even when on foot. However, there can be times when animals are more likely to turn defensive, or may choose to attack, such as when being cornered, they are injured, or surprised. When an animal feels threatened or that you are in too close proximity, they will usually give a visual or audible warning. If those warnings are ignored, an animal will usually resort to either fight or flee.

It is impossible to comprehensively discuss animal behaviour in a quick guide, but the following tips could help better prepare you for dangerous situations you may encounter.

The two golden rules are:

- To always ensure you have adequate distance between you and any animal,
- and to provide the animal with ample choices of escape.

A few basic hints and tips in regards to dangerous game or animals

- Always try to remain calm in stressful situations.
- Be careful of any animal, especially dangerous game that does not flee but keeps a focus on you. It is wise to start planning your exit route.
- Never turn your back on any animal, and try to keep it in view as long as possible.
- Remember; in Africa only food runs! All of the larger and more dangerous game is able to outrun you. In many cases the movement of running will trigger a predatory response in carnivores, and it is thus not advised.
- Watch and listen for birds. Oxpeckers, Cattle Egrets, and Fork-tailed Drongos can all serve as good early warnings to the presence of larger animals such as buffalo.
- If an animal continues to stare in your direction, it could mean you are too close for its comfort. A relaxed animal will carry on with normal behaviour such as grazing etc.
- Always be aware of the wind direction. Keeping upwind gives you an advantage, but it also increases the risk of surprising animals on your route.
- Always make sure any animal you may encounter has enough escape routes at all times. Animals that feel cornered can be very dangerous.
- Always remember that no two situations are the same. Always expect the unexpected. Animal behaviour is not set in stone, and they may act in ways not anticipated or even previously described.
- If an animal is visually or audibly annoyed, it is best to avoid or leave the area entirely.
- If you are being attacked by an animal and have no option to flee, try and protect your torso/stomach area by curling in a ball or lying on the ground. Cover your head with your arms and hands. If the situation allows, it might be worth launching a counter attack to try and save your life. Target the delicate areas like the eyes, ears, nose, throat or groin.

Elephant

Elephants (*Loxodonta africana*) are generally gentle giants, but can turn into very dangerous animals without much warning when provoked. Elephants from regions where poaching or human/wildlife conflict is rife are usually also more hostile towards humans. These fascinating and highly intelligent animals can have complex personalities and characters.

Warning signs of being too close could include raising of the trunk to smell in your direction, holding the head high, flapping the ears aggressively, shaking the head, trumpeting, debris throwing, shaking bushes, tussling the ground, and even mock charges. Be wary of elephants with erect or stiff tails, and keep a close eye on an elephant that mock feeds. A relaxed elephant will usually flap the ears gently, have a relaxed tail, and continue to feed.

With a mock charge the best is to remain calm and stand your ground. Running or making any sudden movements could make the situation worse. Once the elephant/s calm down or leaves, vacate the area as soon as possible keeping a watch in their direction.

A real charge is often silent. Signs that could indicate a serious charge is the lowering of the head and tucking in the trunk. There is not much one can do in a full charge by an elephant, and the best would be to avoid encounters or confrontation with these giants. You cannot outrun an elephant, and it is unlikely you will escape them by climbing a tree as they are able to reach quite high and can push over very strong trees in a matter of seconds. Breeding herds with young calves are the most dangerous, as the herd is very protective of the young. However, bulls in musth should be treated with equal respect, as they may become highly aggressive when they are in this state of testosterone overdrive.



Top Left: Although they can cover vast distances in short periods of time, fresh elephant tracks could indicate that the animal is still in the area and extra vigilance is needed. **Top Middle Left:** Elephants usually leave lots of traces of them having been in an area. Here a broken tree gives away the presence of elephants having visited the area recently. It is good to know the signs and to keep a watchful eye. **Top Middle Right:** Elephant paths can be remarkably narrow for such a large animal. Look out for fresh dung. Elephant dung often has a reddish tinge to it due to tannins in the bark they like to consume. **Top Right:** An Elephant guards the way as members of its herd crosses behind it. Opening the ears to appear larger and an erect or curled tail are all warning signs to take seriously.

Lion

Under normal circumstances Lion (*Panthera leo*) encountered on foot will most often flee rather than risk confrontation with man. Yet, they are always to be well respected!

Dangerous situations usually arise when lions are; old or injured, they are mating, are at a kill, they are startled or cornered, or if you encounter a lioness with cubs.

Warning signs may include a lion flattening its ears and crouching low to the ground, a low growl or roar, showing of teeth, flicking the tail side to side. If these warnings are ignored, a charge may follow. Lion attacks are usually, if not always from close quarters. Females are more likely to follow through with a charge. A mock charge is usually indicated by a stiff legged run and growling with the charge terminated a few meters from the target. Be aware that this behaviour may be repeated. In such a case it is of utmost importance to stand your ground, as turning your back or running will most likely end in tragedy. Shouting and waving your hands to break its concentration may also help. As soon as it is possible to do so, move backwards slowly facing the direction of the lion, until you are at a good distance and able to vacate the area entirely.

Lions outmatch man on nearly every level besides intelligence, thus there is not much one can do in a case where a lion commits to a charge. There are stories of legendary rangers and hunters defeating these formidable animals with knives in dire circumstances, but it is more likely that you will need a well-placed shot from a high-calibre rifle to stop the animal. They are not the best climbers, thus as a last resort one can try escaping up a tree, but this is by no means a guaranteed way to avoid them.



Top Left: The tracks of an adult lion are hard to mistake for something else, as tracks average 12-15cm for lion. They most often walk in prides, but can occur alone. **Top Right:** Although lions aren't exceptional climbers, they manage surprisingly well sometimes.

Leopard

Being incredibly alert and masters of stealth, the Leopard (*Panthera pardus*) is rarely encountered on foot and prefer to avoid humans where possible. They are master climbers, and their strength is incredible. The situations in which leopard may become dangerous are much the same as with lion. However, unlike lion, they are more likely to follow through with a charge once it has been initiated. It will also usually come unexpected and at lightning speed. A leopard should never be cornered, and best is to allow it multiple options to escape where possible.

Coughing, spitting or low growling all indicate that you are too close to a leopard. Crouching low to the ground, showing its teeth, standing side on side with its head lowered, and tail flicking are also warning signs best not ignored. Should you encounter a leopard on foot, move backward at a slight angle from the leopard, keeping your front towards the leopard. You should never turn your back on a leopard! A startled leopard that moves away and crouches down in thickets or grass nearby, means you should vacate the area as soon as possible. Unlike lions, leopards may attack with very little warning. They may charge numerous times, each time from a different angle.



Top Left: A clear set of leopard tracks. Leopard tracks are smaller than that of a lion, and is usually about roughly the size of a human hand palm.
Top Right: A charging leopard moves low to the ground, usually accompanied by some low growls. The speed at which it happens is astonishing, and can be likened to the blink of an eye.

Buffalo

These bovines receive a very bad reputation, but are actually rather peaceful animals under normal conditions. That said, a wounded or provoked buffalo can quickly turn into one of Africa's deadliest creatures! Whilst relatively rare, attacks can be severe and are often fatal. They use the boss on the top of the head to pin victims down to the ground, and use the sharp, curved horns to hook and toss its opponents. They can toss an adult male lion around like a rag, which demonstrates their incredible strength.

The older bulls, often referred to as dagga boys (say dah-gah), struggle to keep up with the herd and like to keep to reed beds and dense vegetation around sources of water. Being slightly vulnerable due to their age and small numbers, they can be very dangerous and are well known for their short and explosive temper. Buffaloes are best avoided where ever possible, as they can have very unpredictable tempers.

Warning signs include lifting the head to get your scent, staring you down, snorting, and stomping the ground. If a buffalo starts approaching you it is best to take cover as soon as possible. If you are quick enough to avoid these fast and agile beasts, climbing a tree could work well to avoid them if the need quickly arises.



Top Left: Buffalo dung resembles that of cows. Fresh buffalo dung is brown to olive-green, and serves as warning to avoid an area. **Top Middle:** Tracks from an old bull. Their tracks resemble cow tracks, and can often be confused with that of eland. **Top Right:** A buffalo cow lifts her head to smell the air in the camera man's direction. Behaviour like this should serve as a stern warning!

Rhinoceros

Although the White Rhinoceros (*Ceratotherium simum*) tends to be a little more docile and predictable, both species of rhino should be well respected. They are built like tanks, and a charging rhino can easily kill a human. Many a ranger have been chased up a thorny tree by an angry Black Rhino (*Diceros bicornis*). These highly inquisitive animals have relatively poor eyesight, and thus they will often come to inspect intruders on their territory. In most cases they will flee, but they are well documented to charge people. Rhinos with calves should be avoided as mothers can be fiercely protective of the young. Pointing the ears in your direction and raising the head could indicate a rhino is interested in you. Warning signs include making snorting or puffing sounds, lowering the head accompanied by stomping or scraping the ground with the feet.

Cheetah

The Cheetah (*Acinonyx jubatus*) is the smallest of the larger cats (they are not considered true big cats as this title is only ascribed to cats that can roar due to a floating hyoid bone and a specially adapted larynx which Cheetah lack). They usually pose little threat to humans and will more often than not flee if approached. It should be noted once again that any animal that is cornered, trapped, threatened or otherwise provoked can be dangerous. Respect goes a long way, especially in the bush!

Hyena

Spotted Hyenas (*Crocuta Crocuta*) are generally fearful of humans and they usually pose little risk during the day. They may become significantly bolder with darkness or when in large groups. If encountered on foot, it is best to deal with hyena much like one would with lion, and it is important to stand your ground and avoid showing fear. Attacks on humans usually occur at night, and most of the victims are children often asleep. Always be cautious should you encounter Spotted Hyena on foot, as they remain dangerous predators. Brown Hyena is very unlikely to pose a risk to an adult, unless provoked.

Hippo

One of the most dangerous animals in Africa! Although accurate numbers are hard to come by, lore has it that the Hippopotamus (*Hippopotamus amphibius*) kills more people each year than do lions, elephants, leopards, buffaloes and rhinos combined.

Hippos are fiercely territorial about the water they occupy, and particularly so in the dry season. They prefer to graze at night, often far away from water but can also be found active outside of their water refuge on overcast and rainy days. When you spot a hippo announce your presence while you are still well away from it. A startled Hippo usually runs for the water and being in between the water and the animal can have tragic results. If in such an unfortunate situation, one can try and avoid a charging Hippo by climbing a tree or jumping out of its way at the last moment into some cover. When approaching a hippo in water too close, they may briefly charge towards the edge of the water, but will rarely exit the water to follow through with an attack. A Hippo opening their mouth and yawning towards you should be seen as a stern warning!



Top Left: Hippo tracks leading into the water, photographed next to the Pienaars River while conducting snare removal patrol in Dinokeng Game Reserve
Top Right: Male hippopotamus mark their territory with droppings that often cover bushes and other items such as rocks and logs/trees. Look out for fresh sign of hippos when out on patrol and try to avoid them where possible.

Antelope

All antelope have the potential of being dangerous, especially when surprised, cornered, trapped, or otherwise molested. The horns of many species serve as deadly weapons of defence and smaller antelope like Bushbuck (*Tragelaphus scriptus*) are well documented causing human fatalities when provoked. Large antelope such as Eland are also known to have caused human deaths, and are best viewed from a distance. Be wary of any antelope displaying a keen interest or that approaches you. If it displays any aggressive or threat behaviour it is best to vacate the area as soon as possible.

Giraffe

Giraffe is another animal often underestimated. These beautiful and usually calm animals have unfortunately caused quite a few fatalities and are best well respected. Always give giraffe ample space if you happen to come across them and stay far away from a giraffe mother with a calf. They have enough power to kill a male lion with a single kick.

Ostrich

Often overlooked as a dangerous animal. They run much faster than humans and the main toe is equipped with a large nail as sharp as a dagger with which they can inflict serious injury and a kick from an ostrich could be fatal. Avoid ostrich nesting areas and ostriches with chicks. Males may also become more aggressive during the breeding season, indicated by their pink/red shins. If attacked by an ostrich, try to climb a tree. They are birds, but luckily cannot fly.

Crocodiles

These large reptiles are ambush predators that make use of stealth to hunt. They can turn up in the most unexpected places, and in areas where they occur any body of water large enough for a crocodile to fully submerge itself in should be approached with caution or avoided if possible. It is recommended to keep 3m or more from any body of water that might contain crocodiles. They are able to propel the entire body out of the water in an instant by using the strong muscular tail. Crocodiles encountered on land usually pose little danger to alert individuals, and are relatively easy to avoid or outrun.

Snakes

Snakes may pose a danger while out on patrol. The best defence against snakes is vigilance and avoiding them altogether. Snakes will most often flee when approached and are normally easily avoided. However, some species like the Puff Adder (*Bitis arietans*) will often lie completely still until the very last moment, making use of camouflage and stealth to hunt and avoid predators. When approached too close they will either emit a loud hiss or puff (hence the name), or strike at the intruder with lightning speed. Bites are rarely deadly, but deformities from the strongly cytotoxic venom are common. Always be mindful of where you place your feet, and step on top of items such as rocks and logs and never over. Other highly venomous snakes include the Cobras, Mambas, Boomslang and Vine Snake. If you come across a snake, remain still, keep calm, assess the situation, then slowly back away from the snake, and replan your route.

Important venomous snake bite tips:

- If you or someone else is bitten by a snake try to remain calm. Staying calm also helps with slowing the spread of the venom, and makes assessing the situation much easier. Remember that with the advances in medical science, very few people die from snakebites in today's times.
- The absolute best advice is to get to the nearest healthcare facility as soon as possible.
- Never try to "suck out" venom or cut the wounds to try and promote the venom "bleeding out". This will very likely worsen the situation.
- Never make matters worse by provoking an already angry snake or waste precious time trying to catch it.
- Never use a tourniquet, especially for bites from cytotoxic snakes such as the Puff Adder. Tourniquets are only used in certain situations where medical help is more than an hour away and a patient has been bitten by a highly venomous snake such as black mamba or cape cobra.
- Never self-administer antivenom. Anaphylaxis and other life-threatening complications may arise and it is only to be administered by medical professionals.
- It could prove useful to lay or sit the victim down with the bite site at a level slightly lower than the patient's heart to help slow the spread of the venom.

Other dangers

Rabies

Rabies is a viral infection that affects the nervous system and is easily transmitted via the saliva (bites) and other infectious tissue or fluids of an infected animal. Infectious tissue or fluids include tears, nerve tissue, saliva, and respiratory tract fluids. Blood, urine, and faeces are not infectious. There is no treatment for rabies once symptoms appear and the disease is 100% fatal.

Be vigilant of any wild animal that seems to have lost their natural fear or approaches you. Foam at the mouth and animals appearing sick or otherwise unwell could all be warning signs of rabies.

Following a bite by a suspected rabies-infected animal, infection can be avoided by the prompt administration of rabies post-exposure prophylaxis (PEP) at the nearest health care facility. If possible, wash any wounds immediately with soap and flush them thoroughly with water for 5 to 10 minutes. It is recommended to always visit a health care facility after sustaining a bite from any animal, no matter how benign it may seem.

Aardvark burrows

Never stand in front of an aardvark/warthog burrow entrance. A warthog that feels threatened may rush out of the hole and are known to cause serious injuries with their sharp tusks.

Ticks

Tick bite fever, also known as Rickettsia, is a disease caused by a bacteria transmitted via bites by infected ticks. Symptoms usually appear within two weeks after a bite, and the first sign is often a red sore that develops a dark crust, called an eschar. Later symptoms may include fever, headache, muscle soreness, swollen lymph nodes, and a rash. Should you start experiencing any of these symptoms best is to schedule a visit to the doctor as soon as possible.

Please always properly check your entire body for ticks after any outing in the bush. Be sure to check the folds of your arms, legs, and groin area. A drop of Dettol, rubbing alcohol, or even Eucalyptus oil, applied to the tick will cause it to shrivel up and drop off the skin. Avoid forcefully removing the tick by pulling or scratching at it.



Top Left: A Bont Tick (*Amblyomma hebraeum*). These ticks act as vectors for *Rickettsia africae*, a bacteria that causes tick bite fever. **Top Right:** Bites from these ticks can also form large eschars.

Thorns

The thorny spines of the Sickle Bush (*Dichrostachys cinerea*) and other large thorns are often able to penetrate through the soles of even the toughest boots. Always be mindful of your next step!



Top: The spines on Sickle Bush (*Dichrostachys cinerea*) are not true thorns, but a form of modified branch.



Top Left: The bark of the Marula tree (*Sclerocarya birrea*) is used for various medicinal uses and are frequently targeted by muti poachers. The bark has several known uses as it contains a natural antihistamine. **Top Right:** A close-up of the same tree to show the extensive damage that has been done to the tree.

Next version to include:

- Basic tracking techniques
- Other traps and methods of subsistence poaching
- Basic hand signals
- Wood and Plant Poaching
- General edits and revisions

If you feel there is a subject I need to include, please email your suggestions to snareremoval@dinokengvr.co.za

Disclaimer

This document is written as a general guide and only serves as a brief introduction to anti-poaching/snare removal activities. The advice, recommendations, protocols, suggestions, and instructions provided should be treated as guidance only. The Author, Dinokeng Voluntary Rangers Association and the Dinokeng Game Reserve and any of its affiliates takes no responsibility for how the information contained within this guide is utilized, and cannot be held liable for any damage, loss, injury or death sustained due to its use. This document may not be reproduced, distributed, sold or altered in any way without authorization.