

SKY VET REPORT

OCTOBER 2016 TO JANUARY 2017



SKY VET QUARTERLY OVERVIEW

During October 2016 - January 2017 the DSWT/KWS Sky Vet program was called to handle **19 wildlife cases** several of which were supported by the DSWT helicopter or outsourced helicopters to help with elephant darting operations as well as search and monitoring operations using the DSWT's fixed-wing aircrafts.

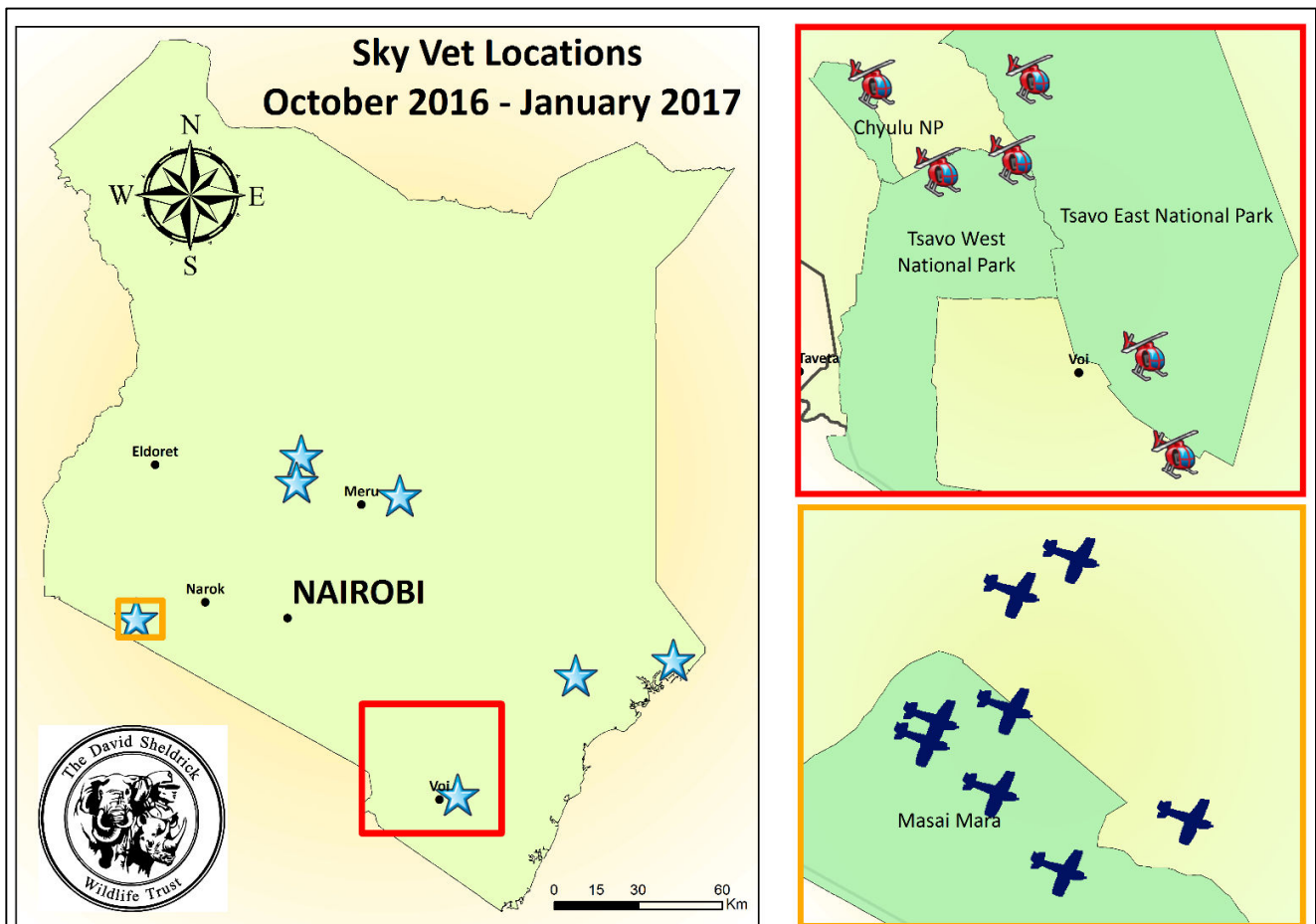
Of all the cases attended there were **16 elephant cases** including 3 spear cases, 3 snare cases, 7 poisoned arrow cases, 1 case with a gunshot wound plus 1 case caused by human-wildlife conflict and 1 case with a natural cause.

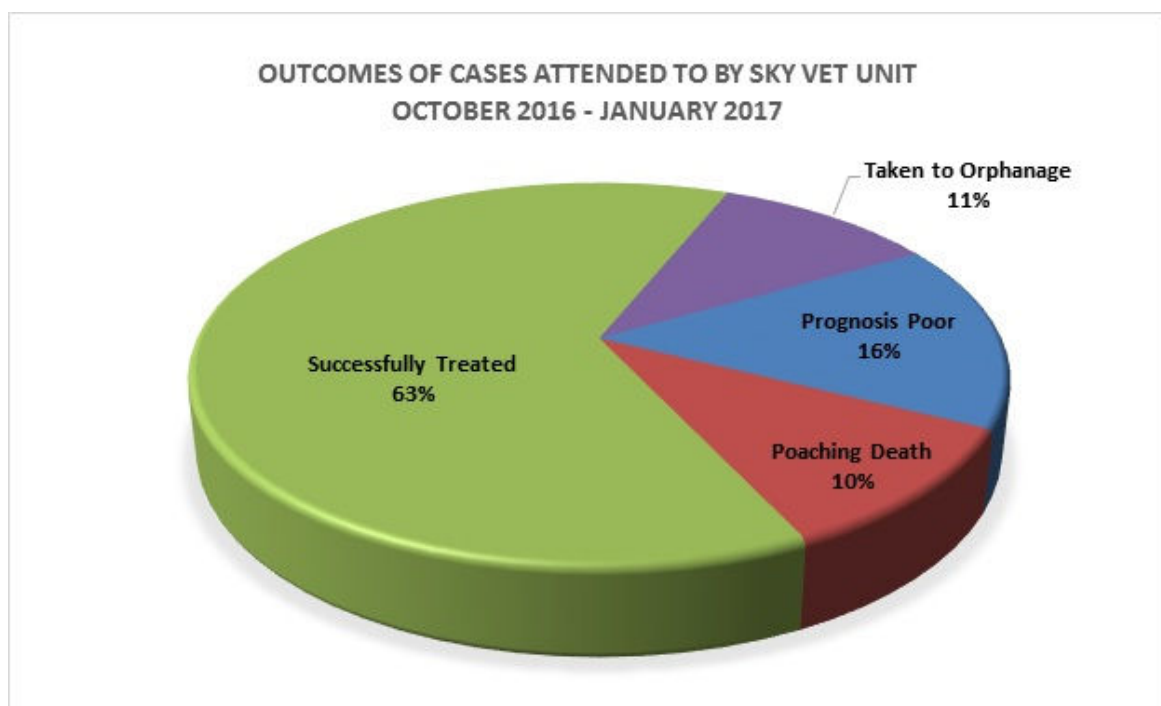
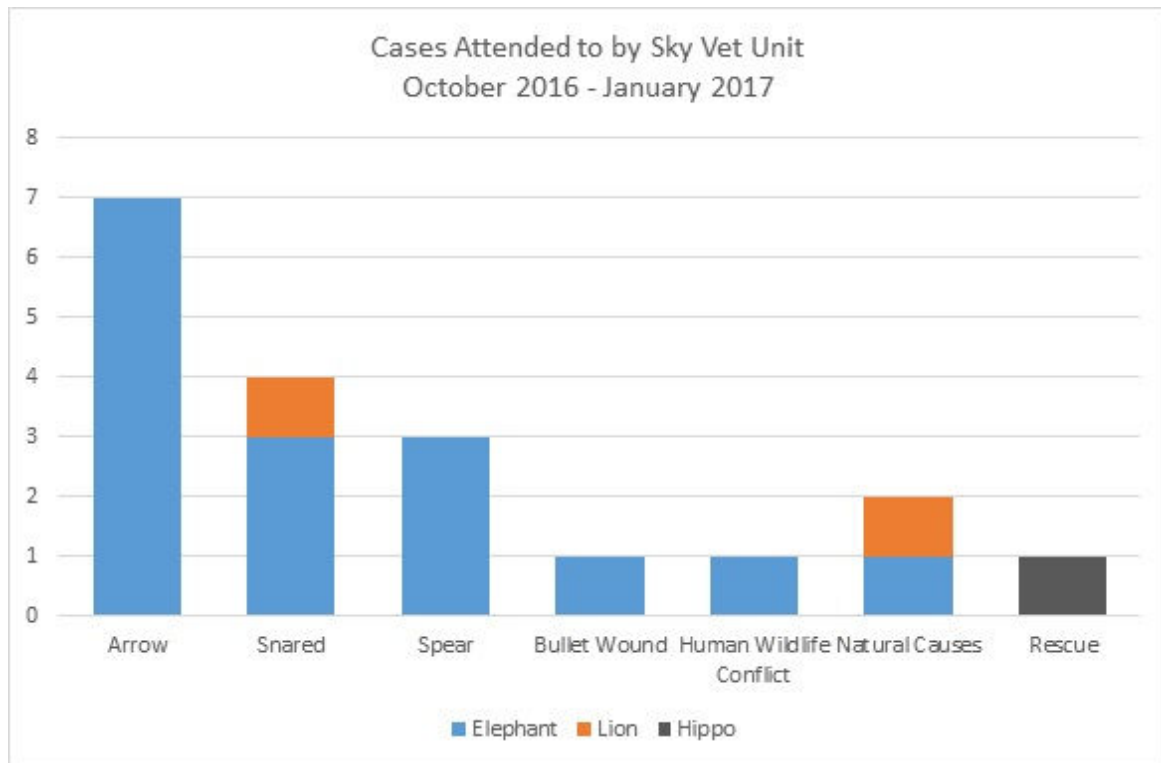
Sky Vet also attended to several lion cases including 1 snared lion, whilst the rest of the lions were treated for injuries caused by natural causes. A baby hippo was also rescued from the north coast of Kenya having been found abandoned in a dried-out water pan.

The KWS Veterinary Officers involved in these cases were flown throughout Kenya during this reporting period including cases in Tsavo East and West National Parks, the Chyulu Hills, the Masai Mara, Meru National Park and Laikipia North, as well as the coastal district as far as Kiunga Forest.

Out of the cases treated there was a 74% success rate with positive prognoses. Without rapid veterinary response, the majority of these cases would have died from their injuries.

The Sky Vet program has deployed KWS vets to the following locations during this reporting period





CASE 1: 5th October 2016

CHYULU HILLS NATIONAL PARK

INJURED ELEPHANT

INTRODUCTION

The elephant was initially spotted by Umani Rangers on 28th September 2016 within the thick Kibwezi forest, only to disappear before veterinary assistance was offered. It resurfaced near Umani springs still severely lame as spotted and reported by same the rangers. Quick intervention was sought by air lifting the from Amboseli National Park using DSWT light aircraft to the Chyulus where DSWT helicopter was waiting in order to facilitate easy fast and effective darting. He was found under the tree canopy resting, under keen watch of three Umani rangers.

CHEMICAL IMMOBILIZATION & TREATMENT

The elephant was forced to move out of the thick shrubs by the helicopter from which darting was done. It was darted as he closed the dusty road. He was maintained on visual at the edge of the dusty road and was down on right lateral recumbence in six minutes. Straps tied around the front limbs and anchored on to tractor were used to flip him over to left lateral recumbence. The right ear was used as blind fold and trunk was kept patent with aid of a piece of stick at the end. He was slightly emaciated and severely lame on the right fore limb. At the lateral right humerus bony prominence was a half centimeter diameter penetrating creamy pus oozing wound. It was pronged but was shallow only holding about 20cc fluid by volume. At the same limb fetlock joint area laterally was a shallow septic maggot infested wound about 10cms in diameter. At the left ear at lower third margin distally was another shallow pus covered wound about 12cms diameter on the inner side. The shallow wounds could have caused by blunt trauma accrued probably as animal wander on rugged bushy lava terrain while the penetrating one appeared to have been caused by an arrow.

The wounds were attended to one after the other all receiving similar attention. Each was cleaned with copious amount of Hydrogen Peroxide allowing enough effervescence to remove as much dead tissue as possible. Then each was flushed with Tincture of Iodine adlibitumly. The penetrating wound was slightly deep just accommodating about 20cc of fluid by volume but just on humerus lateral prominence. The two shallow wounds were generously topically covered by 20mgs ivermectin to get rid of maggots where possible while the shoulder one was infiltrated with one tube of Cloxacillin cream. All wounds were then smeared with wet green clay to enhance epithelialization.

PROGNOSIS

This is fair to guarded considering that the arrow used could have been laced with poison. Sepsis could have extended to joint tissue by the time treatment was conducted.



CASE 2: 10th October 2016

ISHAQBINI, COASTAL AREA

INJURED LION

INTRODUCTION

This lion was spotted and reported by community members and confirmed by Northern Rangeland Trust rangers in Ishaqbini Conservancy on the 9th October. The DSWT Amboseli vet was flown there by the DSWT light aircraft from Kaluku. The team was then picked by the conservancy ground team and taken to where the lion was snared with winch wire in the community area.

CHEMICAL IMMOBILIZATION & TREATMENT

The lion was sedated using 150mgs Ketamine and 1.5mg Medetomidine in 1.5cc dart. Darting was completed on foot because it was in a thicketed area where vehicles could not access. It was fully sedated in four minutes and blindfolded using a towel. It was placed on right lateral recumbence to assess the snare damage. A foul smell was emanating from the snared left hind limb wound. It was observed that the winch snare was anchored onto a tree branch resulting in a tether-like action. The snare wire was just below the hock joint from where the lion had self-mutilated the rest of the limb as it tried to remove the snare. Exposed metatarsus joint bone components were evident of the trauma suffered giving an indication of an amputated limb. The wounds were heavily infested with maggots meaning the animal had been trapped for more than a week without food or water. This was also depicted by emaciation and dehydration of the animal.

PROGNOSIS

Due to poor prognosis, the animal was euthanized using 2000mgs Sodium Pentobarbital intracardial to eliminate suffering. Trophies were secured by the KWS Garsen Post of Tana Delta Station for safe custody and onward transmission.



CASE 3: 10th October 2016

TSAVO EAST

INJURED ELEPHANT CALF

INTRODUCTION

This baby elephant was spotted and reported by DSWT Tsavo East de-snaring team as having difficulties in walking caused by a swelling on the left hind limb knee joint. The Amboseli Vet Unit was within the Tsavo East having responded to another case concerning a snared lion in Tana Delta. The Vet was flown from Tana Delta to Voi airstrip by DSWT aircraft to connect with DSWT ground teams.

CHEMICAL IMMOBILIZATION & TREATMENT

The calf was darted with 1.5mgs Etorphine in 1.5cc dart filled with 500I.U Hyalase. Vehicle darting was used and the elephant was within a family of ten individuals. The dart landed on the right gluteal muscle; he was slowly limping on the left hind limb. The aim was to immediately chase the other family members to a safe distance immediately after the calf went down following narcosis. It was fully immobilized in five minutes assuming right lateral recumbence. Promptly the family members were chased away using one vehicle as the other vehicle remained to safeguard the vet team. The left ear was used as blind fold and trunk was kept patent with aid of a piece of stick across distal open end. The left hind limb had several traumatic wound injuries at the knee joint laterally making the limb swollen. The four penetrating wounds were assumed to have been caused by attempted lion attack on the calf.

All wounds were cleaned with Hydrogen peroxide and rinsed with Tincture of iodine expressing all dead debris and pus. Three Cloxacillin antibacterial cream was infiltrated in all wounds before wetted Green Clay was generously packed in each. Anesthesia was reversed using 12mgs Diprenorphine Hydrochloride into jugular vein prompting it to be up in three minutes. He called out (trumpeted) to the family members who were about hundred meters away. One vehicle was left near the calf while the other went to drive the rest of the family members towards the calf. His mother was also trumpeting and when they were thirty meters apart the vehicle guarding the calf pulled away. The mother spotted the baby and went straight to it followed by the rest of family members. All recognized the calf and ambulated away slowly towards the waterhole nearby. It will be reviewed in one week time and intervention performed accordingly if need be.

PROGNOSIS

Was presumed to have fair prognosis considering the wounds were less than a week old and calf was still strong.



CASE 4: 29th October 2016

OLE SUKUT, MASAI MARA

INJURED ELEPHANT

INTRODUCTION

This elephant who appeared to be the Matriarch of the family was in company of about ten members of the family who had been saved from members of a nearby community who wanted to kill them in retaliation for having invaded their crop farms. They had crossed over to farmlands in Trans Mara overnight causing destruction with irate villagers resorting to harming them in revenge. The KWS and Mara Elephant Program teams got information on this and responded by driving these elephants from the farms into the conservancy but not without some injuries inflicted in a number of them.

CHEMICAL IMMOBILIZATION & TREATMENT

These elephants were found huddled up together in a small bush within the conservancy and appeared nervous. Three members of this herd had injuries suspected to have been caused by arrows and spears. The matriarch nursing a two-and-a-half-year-old calf had several arrowheads stuck into her body and clearly requiring quick intervention to save her life. This elephant was restrained with use of 16mgs etorphine hydrochloride delivered through a 3ml daninject dart. Darting was done from a helicopter. She was guided to an open area before drugs taking full effect after eight minutes. She fell on her left lateral side. Examination revealed several arrowheads stuck almost entirely on her body including the face. She also had an open wound on her right thigh suspected to have been caused by spearing. All the arrowheads which were barbed were retrieved gently and resultant wounds which were relatively fresh disinfected with tincture of iodine. The bleeders from spear wounds were arrested and wound disinfected with tincture of iodine. Additional treatment included intramuscular administration of 30000mgs amoxicillin antibiotic and 100mgs dexamethasone sodium. Luckily the arrows were not poisoned. Before reversal, this elephant was fitted with tracking collar for ease of follow-up and to also inform management on her movements as she is a habitual crop raider.

PROGNOSIS

Good. Subsequent follow-ups showed she greatly improved and has moved into Masai Mara National Reserve.



CASE 5: 4TH NOVEMBER 2016

MERU NATIONAL PARK

INJURED ELEPHANT

INTRODUCTION

The elephant was spotted by the KWS rangers while on routine patrol. DSWT made plans made to airlift the vet from Nairobi to Meru National Park immediately. The veterinary team attended to the case for assessment and treatment. The elephant was darted from a helicopter.

CHEMICAL IMMOBILIZATION & TREATMENT

The elephant was immobilized using 17 mgs Etorphine Hydrochloride in a 3cc dart topped up using water for injection. Darting was done using the Dan Inject system and was done from a helicopter. The elephant went down on dog sitting position after 12 minutes and therefore had to be flipped to access the wound and for safety of the elephant.

The trunk was maintained patent using a piece of stick placed across the nostril entrances. The temperature was high hence plenty of water was doused on the elephant to keep the body temperatures low. The ears were used as blindfold.

On physical examination the elephant had a wound (approx. 1 month old) on the left ear. The wound had penetrated all the way to the right fore limb. The entire front of the elephant had septic wounds owing to the highly toxic poison used in the arrow. The wounds had plenty of necrotic tissue.

The wounds were thoroughly cleaned using clean water and Hydrogen Peroxide. The necrotic tissue was also debrided to hasten healing. The wounds were then lavaged using tincture of Iodine. Topical antibiotic cream and green clay was then applied into the wound to facilitate healing and avoid infection. The elephant was then injected with 200 ml Betamox L.A and 100 ml Dexamethasone at different sites intramuscularly. The entire operation lasted about 30 minutes.

PROGNOSIS

Prognosis is good.



CASE 6: 12TH NOVEMBER 2016

OL DONYIRO, LAIKIPIA

INJURED ELEPHANT

INTRODUCTION

Scouts from Samburu Trust reported an elephant with an injury and deformity of its trunk which prevented it from normal feeding or drinking. Closer observation of this elephant to determine the extent of injury was difficult because it was in a herd. KWS rangers in Ol Donyiro out post patrolled the area and located the elephant on the 12th November.

CHEMICAL IMMOBILIZATION & TREATMENT

Immobilization was achieved using Captivon® delivered in a 1.5cc Dan-Inject dart from a helicopter provided by DSWT. The dart was placed into the dorsal gluteal muscles after a brief chase into open ground. The first dart failed and a second dart was administered 20 minutes later which was effective and the elephant which fell into a 'dog sitting' posture and was tipped to left lateral recumbence for examination.

Examination showed a perforation on the mid ventral aspect of its trunk. This was an old wound which had healed with red scar tissue formation and deformity of the trunk. The cause of this traumatic injury could not be established. No treatment was required. Antibiotics were administered to manage risk of infection due to immobilization stress.

PROGNOSIS

We expect that this elephant will adapt to the deformity of its trunk.



CASE 7: 12TH NOVEMBER 2016

OL JOGI, LAIKIPIA

INJURED ELEPHANT

INTRODUCTION

Scouts on patrol reported an elephant showing severe lameness at the boundary of Mpala and Ol Jogi Conservancies on 31st October 2016. A subsequent effort to track the elephant for treatment was unsuccessful until 12/11/2016 when it was reported by KWS rangers on patrol in Ol Jogi Conservancy. Following this report the elephant was immobilized for treatment.

CHEMICAL IMMOBILIZATION & TREATMENT

A helicopter was provided by the DSWT to dart this elephant. Captivon® 20mg was delivered in a 3cc Dan-Inject dart to the dorsal lumbar muscles and the anesthetic took effect within 5 minutes. The elephant was examined on left lateral recumbence after dousing the injury with plenty of water and covering its eyes with the ear flap.

Examination showed a puncture wound approximately 1 centimeter in diameter penetrating into the carpal joint. On probing with forceps, the wound was more than 15 centimeters deep. These findings are consistent with gunshot injury although there was no exit point.

The wound was cleaned and the necrotic tissue removed with Hydrogen peroxide and application of topical antiseptic. The elephant was then administered with antibiotic and anti-inflammatory drugs.

PROGNOSIS

Prognosis for this case is guarded due to the involvement of the joint. Our recommendation is that the elephant should be monitored closely to assess its response to treatment.



CASE 8: 12th DECEMBER 2016

MAKTAU, TSAVO NP

INJURED ELEPHANT

INTRODUCTION

The elephant was spotted and reported by DWST de-snaring team based at Maktau Gate as being unable to ambulate due to a swollen left forelimb. The Amboseli Mobile Vet Unit Vet was picked by the DWST fixed wing for prompt response from Amboseli to the location where the de-snaring team was waiting.

CHEMICAL IMMOBILIZATION & TREATMENT

The elephant was darted with 17mgs Etorphine topped up with water for injection in a 3cc dart from a vehicle. The dart was placed in the rump and he ambulated with difficulties before stopping and falling on left lateral recumbence after seven minutes. Its right ear was used as a blind fold and the trunk was kept patent by use of a piece of stick stuck.

The left limb was palpated on the medial side for any trauma and pitting on pressure was evident due to edema. Aspirations were tried at three different locations but all yielded clear edema fluid. The elephant was turned with the help of ropes anchored to the vehicle to the right recumbence to expose the left forelimb dorsally for further examination. It was noted to have a penetrating pus oozing wound on the lateral carpal joint. It was pronged for any foreign body using forceps. It was assumed to have been caused by penetrating spear and was about fifteen centimeters deep pointing rostrally but involving the joint capsule. The injury was more than two weeks old. The wound was generously cleaned with Hydrogen Peroxide and Iodine. Cloxacillin cream was infiltrated into the canal followed by wet Green Clay.

PROGNOSIS

This is guarded until after treatment review is done.



CASE 9: 15th DECEMBER 2016

KALUKU, TSAVO EAST

INJURED ELEPHANT

INTRODUCTION

After being elusive for about a week this elephant was spotted by the DWST air team who kept surveillance until the Amboseli vet was procured to offer the necessary treatment. The vet was picked by DWST air craft from Amboseli N.P. to Kaluku air strip to join the DWST ground and air team. It had pus oozing wound on the left belly side.

CHEMICAL IMMOBILIZATION & TREATMENT

Helicopter darting was paramount considering the terrain in which the candidate was in. A euro copter was used in the exercise and the candidate was immobilized using 17mgs Etorphine in a 3cc dart after pushing it to a convenient fairly open ground to allow the ground team accessibility and any maneuver if required. The dart landed on the spine and after fifteen minutes it was determined that another dart was necessary. A second dart was prepared quickly while in the chopper of the same dose. The dart struck the left rump and the elephant was down on left recumbence in five minutes. The chopper landed and the vet coordinated the exercise. It had to be flipped to the right recumbence to expose the injury on the left side. This was done with ropes anchored on a bush truck. His left ear was used as a blind fold. The exercise had to be done quickly because the candidate had been driven for a long period using chopper exacerbated by the initial faulty dart. The trunk was maintained patent by use of a piece of stick.

The oozing wound was barely ten centimeters deep and approximately could hold about a hundred milliliters. It was probed for any foreign body but none was recovered. It was presumed to have been inflicted by an arrow.

The wound was liberally cleaned with Hydrogen Peroxide and Iodine. One Cloxacillin Ointment tube was infiltrated into the pouch followed by wet green clay. Systemically it was covered with 30000mgs Tetracycline into two different muscle sites and 50ml Dexamethasone intravenously to stabilize cell membranes and avoid capture myopathy after a long trail.

PROGNOSIS

Favorable.



CASE 10: 23RD DECEMBER 2016

KIUNGA FOREST, LAMU

HIPPO RESCUE

INTRODUCTION

In the late hours of the 22nd December Angela Sheldrick received a report from Lamu regarding an orphaned hippo that required rescuing, and plans were put in place to conduct this rescue early the following day.

CHEMICAL IMMOBILIZATION & TREATMENT

The tiny hippo calf had been found stuck in the mud of a drying pond within the large Kiunga forest by the forest rangers and there were no other hippos to be found in the area; the mother might have abandoned it because it was stuck in the thick mud of the drying water hole and she too required more water in order to survive. Nevertheless, something had caused the two to separate and now the hippo calf was alone and in desperate need of food and milk. The rescue team, comprised of two DSWT keepers and a KWS vet, Dr Njoroge, flew from Nairobi to an airstrip nearby to the area the calf was stuck, landing around noon, where upon they touched base with the rangers who had found the calf. Without wasting any time the team boarded a helicopter and after a ten-minute flight they reached the point where the hippo was. They landed and approached another team who were waiting with the calf and keeping watch. The calf was darted to sedate it throughout the rescue process and to prevent it from potentially moving further into the mud; the team were also ready with a net to trap the calf if it attempted to do this as well. The vet managed to dart the calf and just as he started trying to walk further into the muddy pond he was trapped with the net and held down to help him relax before transporting him. After a few minutes the calf was relaxed and sedated and he was safely placed in the rescue bag and wrapped in a wet blanket to keep her cool throughout the rest of her journey. She was placed into another transport bag and secured to the skids of the helicopter as there was not enough space inside to fit her! The helicopter took off safely with the hippo calf hanging in the big rescue bag between the skids and everything went according to plan, with the hippo calf arriving safely at the airstrip where she was loaded onto the awaiting caravan aircraft. The whole rescue operation took around 45 minutes from arriving at the scene to returning to the airstrip. From the Lamu-Kiunga forest the hippo calf was airlifted to the DSWT Kaluku HQ in Tsavo where she was to be hand raised near the Voi stockades. The calf was identified as female and seemed in okay overall condition, though a little weak. She was happy to walk about the area that had been created for her and enjoyed being showered with water to remain cool in the high temperature of the afternoon in Tsavo! She was aged to be around one month old.

PROGNOSIS

At first, she was quite aggressive to other people and kept on charging everyone who entered her temporary enclosure, but since the employment of a full-time Samburu keeper she has calmed down a lot and now even drinks approximately 6 litres of milk per day from a bottle. At night she is kept in a safe enclosure to protect her from predators. She is quite unique in the sense that she has nostrils as well as a valve in her throat which will shut off and block any water or milk for that matter. So therefore only drinks when she feels like it. We try to keep her wet during the day but despite having a pool to cool down in, she prefers to lie in the sun for most of the day. Her skin though, produces its own moisturiser which protects her from the sun.



CASE 11: 27TH DECEMBER 2016

MUSIARA, MARA MARA

INJURED ELEPHANT

INTRODUCTION

Between Christmas and the New Year when most people are away on holiday, we were alerted by Patrick Reynolds from Governors Camp that an elephant with a snare around its ear had been sighted and was in need of treatment. Sky Vet was called upon in the absence of the resident Mara Mobile Veterinary Unit which chooses this time of year to take their annual leave. KWS Veterinary Officer on duty Dr. Ngoroge was mobilized to be flown down by our Sky Vet Project from Nairobi to the Masai Mara to provide the necessary intervention. They located the elephant feeding on the plains and at first it appeared to be a straight forward case. However, matters took a different twist, for once darted, the elephant unexpectedly chose to run into the Musiara Swamp, and it was within this quagmire that it succumbed to the drug and fell unconscious, fortunately on its haunches so that its breathing was not compromised.

CHEMICAL IMMOBILIZATION & TREATMENT

The difficulty was that the rangers were very reluctant to enter the swamp due to the possible presence of hippo and crocodiles. Dr. Ngoroge therefore was faced with a difficult decision, knowing that the life of this elephant depended upon him at this time, he bravely waded into the marsh with his dart gun in hand, floundering around in extremely challenging conditions, and once he finally reached the elephant was able to confirm that its breathing had not been compromised and that it had not drowned, with the trunk remaining unrestricted. He commanded that the rangers follow him, and reluctantly a couple obliged and brought the much-needed wire cutters to the scene. The snare was cut from the elephant's neck and ear, but still the challenge remained about how to evacuate the swamp safely after the elephant had been revived. The decision was made to dart the elephant from a distance with the revival drug, affording the vet and his team time to wade back to the safety of the shore before the elephant rose to his feet and could reach them. This was duly done, and everyone stood by with baited breath hoping for the best. Thankfully it was not long before the recumbent elephant began to stir and got to its feet, freed from the snare that was cutting into his ear. This story had a happy ending, and it is thanks to the bravery and leadership of Dr. Ngoroge who despite the risks led the way.

PROGNOSIS

We are proud that yet again the DSWT Sky Vet project has been able to provide timely intervention in partnership with KWS to save yet another elephant, and relieved this elephant received timely treatment before he disappeared and could no longer be helped, as in the Mara there is always the possibility of them crossing the Tanzanian border where our team would not be able to follow.



CASE 12: 29th DECEMBER 2016

MARA NORTH

INJURED ELEPHANTS

INTRODUCTION

A report of elephants injured after raiding farms in Mara North area was received at the Vet Department on 29th December 2016 and confirmed to be on sight by a ground team from Mara North Conservancy.

A team from Vet comprising of Dr Lekolool and Ranger Pemba accompanied by Lina of DSWT travelled to Mara North on the 29th December 2016 afternoon to attend to the cases. The DSWT chartered a Bosckovic aircraft for prompt response to the cases by the team under the sky vet initiative.

CHEMICAL IMMOBILIZATION & TREATMENT

On arrival at the Mara Shikar airstrip, the team was joined by a team from Mara North Conservancy led by Marc Goss who volunteered to use their helicopter for confirming status of the elephants and darting. The two injured elephants were in a group of seven, two of which had collars. The adult male was identified by the slight limping and open wound on the right shoulder. This animal was reported to have been bleeding heavily earlier in the morning but close observation revealed that the bleeding had ceased and there was no foreign body protruding from the injured area. A decision was arrived at to continue observing him for several days before any intervention.

The sub adult male had a wound on the back that was oozing copious amounts of pus. This animal was then darted on the right thigh at around 1646 hrs from a helicopter using a Daninject darting system containing 5mg Captivon. The animal showed signs of induction in about 4 min of darting and went down 2 min later. A general examination revealed a deep wound at the back having been caused by a sharp object that had cut through the skin and exited a few cm away. The wound was filled with thick pus creating a pocket under the skin in the affected region. The wound was then debrided and flushed with water and hydrogen peroxide to remove pus, foreign bodies, any dead tissues and support healing process. Tincture of iodine was then used to flush the wound to prevent secondary bacterial infection before packing the wound with green clay that has been proven to play a key role in wound treatment. An antibiotic cover was administered intramuscularly using 10000mg Oxytetracycline dihydrate (Alamycin LA). The Elephant was then revived at 1720hrs using 50mg Naltrexone hydrochloride (Trexonil) administered intravenously. The animal was up after 2 min.

PROGNOSIS

The elephants in the area are prone to human inflicted injuries due to tendencies of crop raiding in the neighboring farms leading to human-elephant conflicts. Both elephant have been given a positive prognosis.



CASE 13: 5th JANUARY 2017

SERENA, MASAI MARA

SNARED ELEPHANT

INTRODUCTION

A wire snared elephant in solitary was sighted on 5th January 2017 by Masai Mara National Reserve rangers on patrol. The DSWT made an immediate plan to airlift a vet from Nairobi KWS headquarters to attend to the case through the sky vet program.

CHEMICAL IMMOBILIZATION & TREATMENT

The elephant was promptly desnared. The wound was about 10cm wide by 10cm depth and had pus due to the strangulating wire snare which was deeply embedded into soft tissues. The left fore limb was heavily swollen. The wound was cleaned with copious amounts of water to remove mud, dirt and pus. The wound was thoroughly cauterized with dilute hydrogen peroxide, then again was liberally cleaned with Tincture of iodine. The sinuses formed by the embedded wire were thoroughly lavaged with Tincture of iodine. Oxytetracycline spray and cream (Norbrook Laboratories (GB) Limited, United Kingdom) was applied. The wound was covered with green clay to promote faster healing. The elephant was then injected with the following;

- i. Oxytetracycline 30% L.A-100 ml intramuscular
- ii. Dexamethasone HCL-50ml

PROGNOSIS

Good



CASE 14: 5TH /6TH /7TH JANUARY 2017**MATIRA, MASAI MARA****INJURED LIONS****INTRODUCTION**

The first lion was an 8 year-old lioness in a pride of lions that had engaged in a fight. The lioness was spotted at Matira camp, an area within Masai Mara NR near Olkiombo Airstrip. The lioness had a limping gait and visible injuries on the head and both forelimbs with the bigger injury on the right fore limb. A veterinary team was airlifted to the reserve immediately hence the wound was relatively fresh by the time of arrival.

NB: Four large males have recently moved into the area and chased off the resident male lion. The resident pride females appear to be consistently fighting with the adult males (presumably to prevent them from killing the young cubs in the pride). The pride is very successful and the females are in very good condition) although it was soon discovered that another two lions were also in need of veterinary intervention.

CHEMICAL IMMOBILIZATION & TREATMENT

The lioness was captured by darting from a land cruiser using 2 darts comprising of a total of 600mgs of ketamine HCL combined with 8mgs of medetomidine HCL. It took about 5 minutes for the drug to take effect after the second dart was employed 15 minutes after the first dart failed to be effective. The lioness was put on lateral recumbence with a blind fold and thereafter, the wound examined. The wound was extensive and involved the soft tissues and the skin.

The wound was cleaned using normal saline. The wound was then sutured using 2.0 cat-gut with a simple interrupted pattern for the soft muscle tissue. A simple continuous pattern with chromic catgut no 2.0 was used for the skin tissue.

Oxytetracycline spray, ointment and green clay was also applied on the wound to hasten healing. Further treatment involved intramuscular injection of Betamox and dexamethasone. The operation took about 1 and half hours.

PROGNOSIS

The lioness is in a stable condition and has good chances of healing and full recovery. The injury affected the soft tissues with no traumatic injury to the bones and internal organs, hence quick healing is expected.



CASE 15: 12TH JANUARY 2017**MARA TRIANGLE****INJURED ELEPHANT****INTRODUCTION**

This report describes a clinical case intervention of a male elephant in the Mara Triangle. The elephant was sighted by the Mara Triangle patrol rangers along Sanguriai Riverine thicket with an arrow-head stuck on the right upper thigh. The arrow was still attached to a wooden handle and stuck to the elephant. There was an urgent need to attend to the animal and remove the arrow that was already causing more traumatic injuries to the leg and creating septicemic wound. Immediate arrangements were then made between KWS and David Sheldrick Wildlife Trust to send a vet through Sky-vet to save the animal on time. The vet team was then flown to Masai Mara through a chartered aircraft the same day.

CHEMICAL IMMOBILIZATION & TREATMENT

By the time the vet team arrived in Masai Mara, the injured elephant had got into the thicket along the Sanguria River and could not be sighted for treatment. We therefore contacted Mark Goss to come with a helicopter from the Mara North Conservancy to assist to flash the animal out of the thicket for treatment. Soon the helicopter arrived and the elephant was driven out into the open plains where it was darted on the thigh muscles from a vehicle using 18mgs of etorphine Hcl in a 3 ml Dan-inject dart. The elephant was immobilized after about 8 minutes and went down on lateral recumbency. The wooden handle of the arrow had fallen off and only the metallic arrow-head was found stuck on the thigh causing some hemorrhage and pain to the animal. The arrow was gently pulled out using a pliers taking care to avoid causing further injuries to the elephant. The resulting wound was then probed using forceps to ensure no foreign material was left inside.

The wound was then cleaned with copious amounts of water to remove mud, dirt and pus. The wound was debrided with dilute hydrogen peroxide then cleaned with tincture of iodine. Other treatments were intramuscular injection of Amoxicillin Trihydrate (Betamox®) and dexamethasone to support the wound healing process.

PROGNOSIS

The elephant was revived from anesthesia using 150 mgs of Naltrexone Hcl administered intravenous through the superficial ear-vein. It rose within a few minutes and walked away feeling much relieved. Prognosis was quite good after the removal of the arrow-head.



CASE 16: 14TH JANUARY 2017

NAIBOSHO, MASAI MARA

INJURED ELEPHANT

INTRODUCTION

This report describes a clinical case intervention of a sub-adult female elephant in Naiboshio Conservancy within the Mara ecosystem. The elephant was sighted by the security rangers from the Naiboshio Conservancy and Mara elephant project team who reported to KWS for urgent attention. The elephant was in deep pain and was unable to walk and keep pace with the rest of family.

Quick arrangements were then made between KWS and David Sheldrick Wildlife Trust to send a vet through Sky-vet to save the animal on time. The vet team was then flown to Naiboshio Conservancy the same day through a chartered aircraft.

CHEMICAL IMMOBILIZATION & TREATMENT

After searching for about an hour, the injured elephant was found along the river bank in a large family of elephants, the wound had been covered with dust and was not clearly visible but we could see the elephant limping and could not keep pace with others. It was a bit difficult to dart it because of the deep river and thick bushes along the riverine but after following it for some time we managed to dart it and maintained it on sight until the drug took effect. The elephant was darted on the back muscles from a vehicle using 10mgs of etorphine Hcl in a 1.5ml Dan-inject dart. The drug took effect and it was immobilized after about 10 minutes and went down on lateral recumbency. The elephant had a deep penetrating wound on the medial side of the right carpal joint, the wound was about 3 inches deep into the joint and had injured some of the joint cartilages that really affected the joint movement. The wound was then probed using gauze swabs attached to forceps to ensure no foreign material was left inside and all the necrotic debris removed.

The wound was further cleaned with copious amounts of water to remove all necrotic tissues and pus. The wound was debrided with dilute hydrogen peroxide then cleaned with tincture of iodine followed by intramuscular injection of long-acting antibiotic (Amoxicillin Trihydrate (Betamox®) and dexamethasone to manage the infection and inflammation caused by the injury. The wound was then sprayed using Oxytetracycline antibiotic spray to further support the healing process and keep it free of flies.

PROGNOSIS

Prognosis was quite good after the treatment of the wound.



CASE 17: 19TH JANUARY 2017**MUSIARA, MASAI MARA****SPEARED ELEPHANT****INTRODUCTION**

This is a clinical case report of a young male elephant in Masai Mara National reserve near Musiara gate that had a spear stuck on its abdomen. The elephant was sighted by the patrol rangers near Musiara gate with a long metallic spear sticking on the right upper part of the abdomen. The source of the spear could not be established.

There was an urgent need to attend to the animal and remove the spear that had punctured the abdomen and was causing a lot of pain as the animal walked; it was also quite painful for the tourists and conservationists to watch the animal walking with the spear on its body. The elephant was at risk of developing peritonitis as the spear went through the peritoneum layers of the abdomen. The elephant had become weak and could only walk slowly due to pain and irritation caused by the spear. The Mara North Conservancy used helicopter to search and maintain the elephant on sight before the vet team arrived. Immediate Sky-vet arrangements were made between KWS and David Sheldrick Wildlife Trust to send a vet to Masai Mara to save the animal on time. The vet team was then flown to Masai Mara through a chartered aircraft the same day.

CHEMICAL IMMOBILIZATION & TREATMENT

The injured elephant was found in the open plains in Musiara area where it was darted on the thigh muscles from a vehicle using 10mgs of etorphine Hcl in a 1.5ml Dan-inject dart. The elephant was immobilized after about 6 minutes and went down on lateral recumbency. Soon after the elephant got anaesthetized the spear was gently pulled out by hand, luckily enough it was smooth with no hook or bump on it so it was easier to pull out with limited injury to the animal. The spear was quite long about 5 feet and 2 feet went inside the abdomen puncturing the stomach wall ending in the stomach contents. No vital organ was injured so the elephant has good chances of recovery once the small entry wound is plugged. The resulting wound was then probed using long forceps to ensure no foreign material was left inside. The wound was then cleaned with copious amounts of water followed by 10% hydrogen peroxide then cleaned with tincture of iodine.

PROGNOSIS

Prognosis was good after the removal of the spear. The elephant has limited risk of developing peritonitis since the wound was quite small and was not yet infected.



KMC RANCH, TSAVO

INJURED ELEPHANT

INTRODUCTION

The elephant bull was spotted near the KMC ranch area with an arrow wound on the right abdominal flank with blood oozing out by Rukinga patrol aircraft. The team rushed to the area to find the bull with another drinking water in a nearby dam.

CHEMICAL IMMOBILIZATION & TREATMENT

18 mgs of etorphine in a dan inject dart was prepared and loaded into a dan inject dart gun, the elephant was approached but ran away. Assistance of the DSWT chopper was sought and the Elephant darted. It took him 7 minutes to go down on lateral recumbency of the right side. Ropes tied to a landcruiser were used to roll him over to access the wound.

There was a septic wound with pus oozing out. The lowest side of the wound was opened and necrotic tissues plus pus drained out, then cleaned using water mixed with hydrogen peroxide. Tincture of iodine and Oxytetracycline spray applied. Final cover of wetted green clay was used to cover the wound. An intravenous administration of 50 cc Dexamethasone Hcl was given through the ear vein and 200 cc of long acting Amoxicillin injected intramuscularly.

Drug reversal was done by administration of Diprenorphine Hcl at three times the etorphine dose. He stood up and walked away calmly.

PROGNOSIS

Prognosis is good.



TIVA RIVER, TSAVO EAST

INJURED ELEPHANT

INTRODUCTION

The Elephant cow was seen near the Tiva River area with an arrow wound on the right abdominal flank with blood oozing out by DSWT patrol aircraft. The vet was airlifted by DSWT aircraft to the area and then boarded the Trust helicopter to the site for easier darting.

CHEMICAL IMMOBILIZATION & TREATMENT

18 mgs of etorphine in a dan inject dart was prepared and loaded into a dan inject dart gun, the elephant was approached with the assistance of the DSWT chopper was and darted. It took about 7 minutes and went down in left lateral recumbency. Ropes tied to a vehicle were used to roll him over to expose the wound.

There was a septic wound with pus oozing out on the medial aspect of the right front limb near the fetlock joint. The wound was opened and necrotic tissues and pus drained out, then cleaned using water mixed with hydrogen peroxide. Tincture of iodine and Oxytetracycline spray applied. Final cover of wetted green clay was used to cover the wound.

An intravenous administration of 50 cc Flunixin meglumine was administered through the ear vein and 100 cc of long acting Amoxicillin injected intramuscularly. Drug reversal was done by administration of Diprenorphine Hcl at three times the etorphine dose. She stood up and walked away calmly. Prognosis is guarded.

PROGNOSIS

Guarded

