



**KENYA
WILDLIFE
SERVICE**



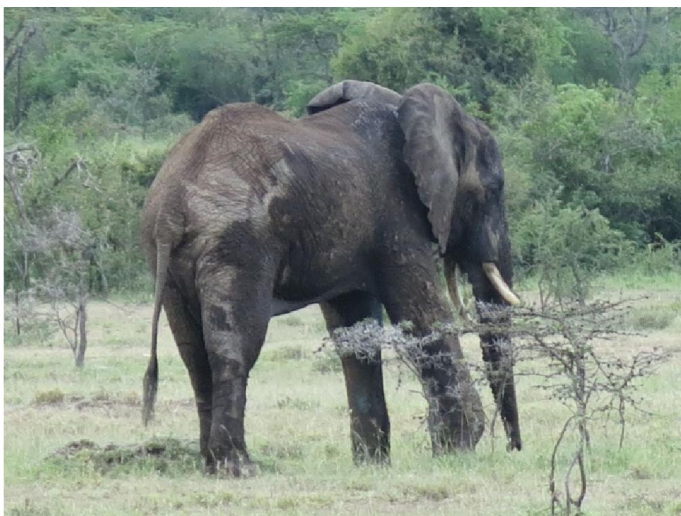
SKY VETS REPORT

FROM THE DAVID SHELDRIK WILDLIFE TRUST

www.sheldrickwildlifetrust.org

SKY VETS REPORT

NOVEMBER 2013 - JANUARY 2014



SKY VETS QUARTERLY OVERVIEW

Over a 3 month period from the beginning of November 2013 to the end of January 2014, the DSWT in partnership with the KWS deployed veterinary officers to 24 emergency wildlife cases through the Sky Vets program. Cases took place in many remote locations throughout the Masai Mara, Amboseli, Tsavo, Chyulu Hills National Park as well as in the Lake Naivasha area.

Out of the 24 cases 12 elephants were treated including a postmortem to confirm cause of death. With the elephants treated all operations went successfully but due to the severity of the wounds, 4 of the elephants are since being closely monitored and will receive further treatment if necessary, whilst the other cases have been given a full recovery prognosis.

During this reporting period Sky Vets also treated 4 lions, 4 giraffe, a buffalo and numerous zebras. During many of the cases the KWS vet was able to treat more than one injured animal. Having been called out to treat an injured elephant, many times on arrival the vet has then received urgent reports about additional injured wild animals in the vicinity. Operating time-efficiently has meant that on one Sky Vets rescue many wild lives could be saved.



Locations: The Sky Vets program has deployed KWS vets to the following locations during this reporting period



CASE 1: OCTOBER 13TH 2013**AMBOSELI NATIONAL PARK****WOUNDED ELEPHANT**

Species African Elephant
Age Adult

Sex Male

**INTRODUCTION**

A male elephant was reported to have a wound on the flank region and to be in a debilitated condition at Amboseli National Park on 13th October, 2013. A Sky Vets team was sent to attend to the case on the same day. A decision was made to immobilize the elephant.

CHEMICAL IMMOBILIZATION

The elephant was immobilized using 16 mgs Etorphine Hydrochloride in a 2cc dart topped up using water for injection. Darting from a vehicle was done using Dan-inject system. Full immobilization took place after 8minutes and the elephant fell on lateral recumbence.

PHYSICAL EXAMINATION AND DIAGNOSIS

On close examination the elephant had a penetrating wound on the flank region oozing with creamy tenacious pus. The wound was then probed for any foreign body and nothing was found. The wounds were thoroughly washed using clean water and Hydrogen Peroxide then lavaged using tincture of Iodine. The dam was injected with 20000mgs of tetracycline (L.A), 2500 mg flunixin meglumine and 100 ml multivitamin at four different sites into muscles. Green clay was then applied to facilitate healing. The operation lasted 25 minutes.

Reversal of immobilization was Diprenorphine Hydrochloride (48mgs) into the ear vein was used. It took 10 minutes to be fully awake from the anesthesia. Prognosis was good and rangers were advised to monitor the elephant.

CASE 2: OCTOBER 30TH 2013**MASAI MARA****INJURED LION**

Species
Age

Lion
Adult

Sex

Female

**INTRODUCTION**

A lioness was reported injured and lame on 30th October 2013. The lioness had not moved from the same spot for 24 hrs. hence speculating serious injury. The veterinary team was informed and immediately attended to the case. The lioness had young cubs (about 9 months old) hence the need for urgent and immediate attention.

IMMOBILIZATION

The lioness was immobilized using 4 mg medetomidine and 295 mg ketamine in a 2ml dart. The lioness was immobilized after 10min. Darting was done from a vehicle using the dan inject system. Opticlox (eye ointment) was applied on the eyes and a blind fold applied.

EXAMINATION AND AFTER CARE

On close examination, the lioness had no physical injuries. However on palpation it was evident that there were internal muscle tears. She also had some injuries on the hind paws. The wounds on the paws were cleaned using clean water then flushed using hydrogen peroxide. They were then lavaged using tincture of iodine. The lioness was then given a dose of 4500 mg Amoxicillin (L.A), 15 ml Catacol and 750mg flunixin meglumine to manage the pain and inflammation. Prognosis is good.

CASE 3: OCTOBER 31ST 2013

MASAI MARA

Injured Lion

Species
AgeLion
Adult

Sex

female

**INTRODUCTION**

A lioness was reported injured and lame on 31st October. The lioness had very limited movements hence speculating serious injury. A veterinary team was dispatched to the reserve for clinical intervention. The lioness also had young cubs (5 months old) hence the need for urgent and immediate attention.

CHEMICAL IMMOBILIZATION AND EXAMINATION

The lioness was immobilized using 4 mg medetomidine and 295 mg ketamine in a 2ml dart. The lioness was immobilized after 8 min. Darting was done from a vehicle using the dan inject system. Opticlox (eye ointment) was applied on the eyes and a blind fold applied. On close examination, the lioness had deep wounds on the hind limbs and on the spinal region. The wounds were about 2 days old. On speculation, the wounds could have been gotten after a fight with another wild animal.

TREATMENT

The wounds were cleaned using clean water then flushed using hydrogen peroxide. They were then lavaged using tincture of iodine. The lioness was then given a dose of 4500 mg Amoxycillin (L.A), 15 ml Catasol and 750mg flunixin meglumine to manage the pain and inflammation.

Prognosis is good- The lioness was spotted hunting and later found feeding on a zebra 2 days after treatment

CASE 4: NOVEMBER 2ND 2013**MASAI MARA****INJURED GIRAFFE**

Species
Age

Giraffe
Adult

Sex

Male

**INTRODUCTION**

A giraffe was spotted with a spear in the shoulder region. The giraffe was immobilized using 14 mgs Etorphine HCl and 40 mg of azerperone in 3cc dart in Dan inject gun. Vehicle darting was employed. It was fully immobilized in 7 minutes. It was then casted using ropes to lateral recumbence then blindfolded. Opticlox was then applied into the eyes.

EXAMINATION AND TREATMENT

The spear had penetrated into the muscles but had not injured the vital organs. The spear head was removed and the wound was cleaned using water and hydrogen peroxide then lavaged using iodine. Antibiotic cream (Opticlox) was infused into the wound then green clay applied. Broad spectrum antibiotic cover was done using 2000mgs of Cloxacilin Benzathine injected intramuscularly and 3000mg flunixin meglumine. Opticlox cream was infiltrated into the eyes and dart wounds after removing the dart.

REVERSAL

Reversal was done using 42 mg Diprenorphine HCl injected into jugular vein and it was up in 3 minutes.

PROGNOSIS

Good



CASE 5: NOVEMBER 7TH 2013

TSAVO EAST

INJURED ELEPHANT

**INTRODUCTION**

A report of a male elephant with an injury on the left hind limb was received from Tsavo East. A sky vets team visited the area to attend to the case. After observation a decision was made to immobilize the animal for examination and treatment.

IMMOBILIZATION

A preparation of etorphine 18mg in a 2ml dart was made. Using dan-inject rifle, the elephant was darted from a vehicle. Immobilization took 12 minutes to take effect.

EXAMINATION AND TREATMENT

The male elephant had a pus filled penetrating wound on the left hind limb. The infected region was cleaned using clean water and hydrogen peroxide. It was then lavaged using povidone iodine. All the dead matter was debrided to give a fast healing effect. Green clay was then applied on the to give a first healing effect. The elephant was injected with 20000mgs of tetracycline (L.A) at two different sites into muscles. The operation took 30 minutes

PROGNOSIS

Prognosis was good The reversal was done after management of the wound. A preparation of 54 mg diprenorphine was administered IV into the ear vein. The reversal took 7 minutes and the elephant was up again and strong.



CASE 6: NOVEMBER 7TH 2013**CHYULU HILLS****Injured Elephant**

The case was reported by the community ranch patrol team. The bull was among a herd of 8 bulls and had a fresh wound, oozing blood from the dorsum. General observation upon arrival revealed a strong bull within a seemingly aggressive herd. The wound was relatively conspicuous as it was confirmed to be discharging fresh blood from the dorsal lumbar region.

**CHEMICAL IMMOBILIZATION**

To facilitate specific examination, the elephant was immobilised using 16mg Etorphine Hcl (M99®) with a combination of 1000 IU Hyaluronidase in a 3ml dart. Darting was done from a vehicle using the Dan inject® remote darting system.

It took about 12 minutes for the drug to take optimum effect and the Elephant went on a left lateral recumbency. On closer examination, there was a penetrating fresh wound on the dorsal lumbar. Probing the wound revealed a spearhead lodged within the lumbar muscles.

PHYSICAL EXAMINATION

The wound was probed with a long tissue forceps to help grip and pull out the spear head. There was immediate relief after removal of the spear head. The fresh wound was flushed clean with copious amount of water. Lugol's iodine was also used to clean the wound then green clay with broad spectrum antibiotic properties was also plugged into the wound. Intramuscular injection of 15 000mg amoxicillin was done.

PROGNOSIS

Elephant recovered with much relief.



CASE 7: NOVEMBER 19TH 2013

AMBOSELI NATIONAL PARK

INJURED ELEPHANT

This case was reported by the Kimana conservancy rangers. They reported a solitary female elephant that could barely move due to joint deformity she had two calves of about 3 and 4years old. On general examination, the elephant had good body condition and demonstrated good appetite as it was browsing on herbage. The left rear limb revealed a rigid joint mobility at the level of the knee joint. There was an extensive protrusion at the joint and the elephant appeared to be dragging the left leg as it could not flex nor extend the stifle joint. There was however no evidence of pain as would have been occasioned by limping.



CLINICAL EXAMINATION

Specific physical examination of the affected (left knee) joint revealed the following significant findings:

- No evidence of physical trauma on the entire limb
- Gross joint dislocation with overriding of the articular surfaces of the distal femur and proximal tibia, both forming the knee joint.
- Joint stiffness
- Limited joint mobility- Flexion and extension not possible
- Mal-union and resultant joint arthrodesis

TREATMENT

The dislocation was irreducible as the joint had already healed with a mal-union that was grossly visible. Prophylactic antibiotic treatment was administered with intramuscular injection of 15000mg amoxicillin. A steroidal dose of 40mg dexamethasone sodium(0.2%colvasone®) was also injected intramuscularly.

REVIVAL AND PROGNOSIS

Anesthesia was reversed using 48mg Diprenorphine Hcl and the elephant recovered successfully. However, the deformity was clearly significant during the attempt to rise up. The mother had very close attachment with her calves and this demonstrated a remarkably sound mothering ability which was very important for the proper thriving of the calves. Advice was given to the security patrol team at Kimana ranch to closely monitor the movement of the elephant as it had limited mobility and therefore posed a significant security concern.

CASE 8: DECEMBER 1ST 2013**MASAI MARA****INJURED BUFFALO**

A buffalo bull with poor body condition had been spotted speared with a tent post metal pipe on the left flank and the tent post had been thrust deep into muscles of the flank and had failed to fall off.

**TREATMENT**

Etorphine Hcl 9mg plus 60 mg of Azaperone Tartrate combination, in a 1.5 ml Dan - inject dart was prepared. Using a Dan inject dart rifle the bull was darted, it was immobilized after 7 minutes. The aged and debilitated buffalo bull had been speared with a tent post. The wound was fresh and blood was oozing out. The penetrating wound depth was 4cm deep left flank and anchored into the area of the following muscles; sacrocaudalis dorsalis medialis muscle, sacrocaudalis dorsalis lateralis muscle and broad sacrotuberal ligament. The hemorrhagic wound was lavaged with surgical spirit and later liberally cleaned with tincture iodine. The testicles were swollen, had been torn by a predator as the buffalo was heavily debilitated. The testicular wounds were cleaned with tincture of iodine and covered with green clay. The buffalo was injected with Amoxicillin Trihydrate 15,000mg (Betamox LA) i.m AND Flunixin meglumine 1,000mg i.m

REVERSAL

Using 36mg of diprenorphine given IV at the ear vein the animal was reversed from anesthesia, recovery was smooth and he ambulated well. Poor prognosis as the buffalo is aged and debilitated and likely to be killed by predators.

CASE 9: DECEMBER 1ST 2013

MASAI MARA

INJURED GIRAFFE

The female giraffe had been sighted limping. Mara Conservancy staff thought it had a deeply seated wire snare and a chronic wound.



IMMOBILIZATION AND PHYSICAL EXAMINATION

The animal was immobilized chemically, using a 3ml dart using a Dan-inject rifle, containing 9mg Etorphine Hcl (M99™), and 60mg Azaperone Tartrate. She became immobilized after 7 minutes. Once the animal had been restrained, the anesthesia was reversed using 36mg of Diprenorphine (M5050®) initially half the dose, given intravenously, through the jugular vein.

TREATMENT

The animal had a wire snare on the right hind leg, located at mid metatarsal region. The wire had cut deep into the skin causing death of tissues developing to a pyogenic wound. The wire was cut and released. The wound was cleaned with copious amounts of water. The wound was also cleaned with tincture of iodine, and then green clay was applied liberally. The animal was given 15,000mg of Amoxicillin Trihydrate (Betamox®) and 40mg of Dexamethasone (Colvasone®) injection by intramuscular route

REVIVAL

The animal was reversed using the balance of M5050® as a single injection through the jugular vein and prognosis is good.

CASE 10: DECEMBER 2ND 2013**MASAI MARA****INJURED GIRAFFE**

The female giraffe had been sighted limping. Mara Conservancy staff thought it had a wire snare.

**IMMOBILIZATION AND PHYSICAL EXAMINATION**

The animal was immobilized chemically, using a 3ml dart using a Dan-inject rifle, containing 12mg Etorphine Hcl (M99™), and 60mg Azaperone Tartrate. She became immobilized after 8 minutes. Once the animal had been restrained, the anesthesia was reversed using 54mg of Diprenorphine (M5050®) initially half the dose, given intravenously, through the jugular vein. The animal had a wire snare on the right hind leg, located at mid metatarsal region. The wire had cut deep into the skin causing death of tissues developing to a pyogenic wound on cranial aspect of the metatarsal region.

TREATMENT

The wire was cut and released. The wound was cleaned with copious amounts of water. The wound was also cleaned with tincture of iodine, and then green clay was applied liberally. The animal was given 30,000mg of Amoxicillin Trihydrate (Betamox®) and 1000mg of Flunixin meglumine injection by intramuscular route

REVIVAL

The animal was reversed using the balance of M5050® as a single injection through the jugular vein and prognosis is good.

CASE 11: DECEMBER 13TH 2013

NAIVASHA

INJURED GIRAFFE

The female giraffe was reported to have a snare and was limping. This case was reported by the de-snaring team from the African network for Animal Welfare (ANAW).

IMMOBILIZATION

The animal was immobilized through the Dan-inject darting system using 12mg Etorphine Hcl (M99™), and 60mg Azaperone Tartrate. She became immobilized after 15 minutes. The animal was then physically restrained using ropes anesthesia was then reversed using 48mg of Diprenorphine (M5050®) initially half the dose, given intravenously, through the jugular vein..

EXAMINATION;

The animal had a wire snare on the right hind leg, located at the metatarsal region. The wire had started cutting through the skin although it had not torn deep into the tissue.

TREATMENT

The wire snare was cut and released to relieve the animal then the wound was cleaned with iodine. The animal was given 30,000mg of Amoxicillin Trihydrate (Betamox®) and 40mg of Dexamethasone (Colvasone®) injection by intramuscular route. The animal was reversed using the remaining dose of diprenorphine Hcl as a single injection through the jugular vein.

PROGNOSIS;

Good

CASE 12: DECEMBER 13TH 2013

NAIVASHA

INJURED ZEBRA

The Zebra was sighted to exhibiting leg carrying lameness and was limping.

IMMOBILIZATION AND PHYSICAL EXAMINATION

The animal was immobilized chemically, using a 3ml dart using a Dan-inject rifle, containing 5mg Etorphine Hcl (M99™), and 50mg Azaperone Tartrate. He became immobilized after 7 minutes.

TREATMENT

The hoof on the left front limb was completely plugged off and there was no keratinous tissue to protect the underlying soft tissue. The exposed tissue was cleaned with copious amounts of water. The wound was then cleaned with tincture of iodine, and then green clay was applied liberally. The animal was given 15,000mg of Amoxicillin Trihydrate (Betamox®) and 40mg of Dexamethasone injection by intramuscular route.

REVIVAL

The animal was reversed using 18mg diprenorphine Hcl through the jugular vein and prognosis is fair.

CASE 13: DECEMBER 13TH 2013**NAIVASHA****INJURED ZEBRA**

The Zebra was sighted to be having a snare on the Neck all the way down to the four limbs.

IMMOBILIZATION

The animal was immobilized chemically, using a 3ml dart using a Dan-inject rifle, containing 5mg Etorphine Hcl (M99™), and 50mg Azaperone Tartrate. He became immobilized after about 6 minutes.

EXAMINATION

The snare was already strangling the neck and locomotion was also difficult since the wire snare restrained both the front and the rear limbs..

TREATMENT

The snare was cut and the freed to relieve the zebra.

The animal was then given 15,000mg of Amoxicillin Trihydrate (Betamox®) and 40mg of Dexamethasone injection by intramuscular route. The animal was reversed using 18mg diprenorphine Hcl through the jugular vein.

PROGNOSIS

Good

CASE 14: NOVEMBER 2ND 2013**NAIVASHA****CAPTIVE ZEBRA FOALS**

The zebra foals were orphans held in a captive facility at the kongoni lodge. The foals were reported to have lost their hair condition and that the hair color was also turning yellow. They were also reported to be having a pot belly.

IMMOBILISATION AND PHYSICAL EXAMINATION

The foals were bright and alert and had rough hair coat which was turning yellow , the mucous membranes were pale and the capillary refill time was more than 2 minutes.

DIAGNOSIS

Helminthiasis and mineral deficiency. The foals were each treated using 1 ml, ivermectin injected subcutaneously. 10 mg , dexamethasone was also injected intramuscularly.

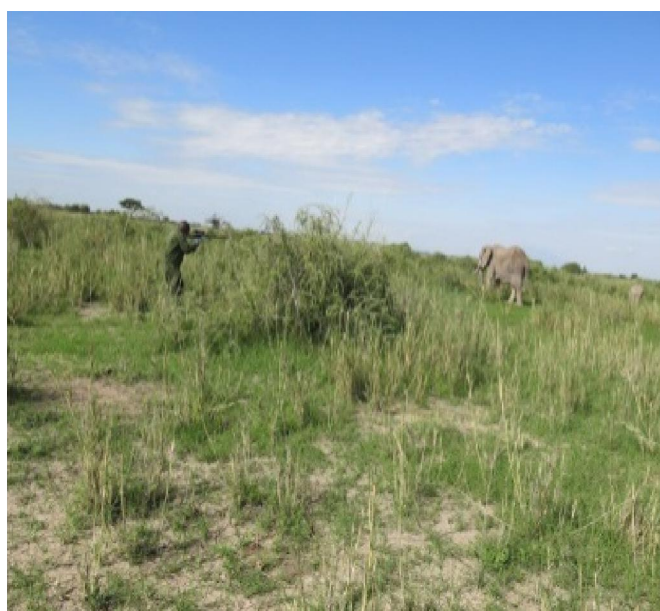
CONCLUSION

Advice was given on routine deworming and supplementation with minerals to condition the hair coat.

CASE 15: DECEMBER 19TH 2013**AMBOSELI NATIONAL PARK****INJURED ELEPHANT**

A case of a female elephant that had gone off feed and lost body condition over a period of three weeks was reported at Amboseli National Park. The animal had a one and a half year old calf and had not moved from the same area for a period of three weeks. This necessitated a veterinary team to attend to the case.

The elephant and her calf were spotted within a swampy area where they had done minimal movement. She was seen to be poor and weak with a body score of 2.5 on a scale of 5. A decision was then made at this point to immobilize the animal so as to carry out a close and thorough examination. This was after taking consideration and precautions based on the fact that she had a one and half year old calf with her and was in a swampy area.

**IMMOBILIZATION**

The elephant was immobilized using 16 mgs Etorphine Hydrochloride in a 2cc dart and topped up using water for injection. Foot darting using Dan-inject system was done since the area was wet and the vehicle could not move to a close range. Full immobilization took place after 6minutes and she fell on lateral recumbence. The young calf was kept away by noise from people and hooting of the vehicle from a distance. The trunk was maintained patent with the help of a piece of stick which was placed across the entrance. The ears were used as blindfold.

EXAMINATION

On close examination, the elephant was observed not have any physical injury. However, the body score was extremely poor. (2.5 on a scale of 5)The muscle tissue was wasted due to the fact that the animal had been off-feed for a considerable period of time. This led to a tentative diagnosis of a viral or bacterial infection.

Sample collection;

A blood sample was then collected from the elephant for verification of the actual cause of the condition.

Treatment;

The elephant was treated using:

-15000mg Amoxicillin (L.A) injected intramuscularly

-100ml catasol for metabolic stimulation

-50 ml Dexamethasone as an anti-inflammatory

REVERSAL AND PROGNOSIS

Diprenorphine Hydrochloride (48mgs) into the ear vein was used. It took 8 minutes to be awake from the anesthesia. However, the elephant was weak and could not get on its feet without assistance. A long rope was hooked to the tusks and on the other end to a vehicle. The animal was then up with the first attempt. Personnel were then advised to keep away from the elephant so as to allow reunion of the female and her calf which happened about two minutes later. K.W.S rangers and community rangers were advised to keep watch on the elephant and relay the information on progress to the veterinary headquarters.



CASE 16: DECEMBER 24TH 2013**MASAI MARA****INJURED ELEPHANT**

An adult male elephant seen walking with difficulty, with abdominal viscera/organs exposed outside the abdominal cavity by conservancy staff. We responded quickly by flying to Keekorok Airstrip and then travelled by road about 70 Km to Olaro conservancy.

**IMMOBILIZATION**

Etorphine Hcl(0.98%) (M99®) (Norvatis South Africa (Pty) Ltd) 18mg, in a 3 ml Dan - inject dart was prepared. Using a Dan inject dart rifle (Dan-inject APS, Sellerup Skowej, Denmark) the elephant was darted; it was immobilized after 10 minutes

EXAMINATION AND TREATMENT

An open puncture wound about 10cm in diameter with suppurative abdominal viscera exposed externally. The pyogenic wound was located cranially to last rib, where the last rib was palpable and caudally the wound was bordering the left paralumber fossa. There was another wound located at right rump area. This wound was discharging fresh blood and had sharp edges caused by a sharp object probably a spear head. The wound was 8 cm wide and 10 cm deep. Dead tissues were excised/cut off. The wounds were cleaned with copious amounts of water to remove mud and dirt, dead tissues were also removed. Later the wounds were cleaned with sterile IV fluids. The suppurative wound was also lavaged with surgical spirit and later liberally cleaned with Tincture of iodine. The wounds were also covered with green clay to promote faster healing.

PROGNOSIS

Guarded. Continuously monitor movement of the injured elephant. Repeat treatment is necessary after 5 days.

CASE 17: DECEMBER 29TH 2013**MASAI MARA****INJURED ELEPHANT**

A female elephant was reported to have a wound on the flank region at Masai Mara game reserve on 29th December, 2013. A sky veterinary team was sent to attend to the case on the same day. A decision was made to immobilize the elephant after arrival and observing the elephant.

**IMMOBILIZATION**

The elephant was immobilized using 16 mgs Etorphine Hydrochloride in a 2cc dart topped up using water for injection. Darting from a vehicle was done using Dan-inject system. Full immobilization took place after 12minutes and she fell on lateral recumbence. However the wound was on the side the animal fell on necessitating the team to use vehicles so as to turn the elephant. The trunk was maintained patent by the help of a piece of stick which was placed across at their' entrances. The ears were used as blindfold.

EXAMINATION AND TREATMENT

On close examination the elephant had a penetrating wound on the flank region oozing with blood. It was a relatively fresh wound from a spear. The wound was probed for any foreign body and there was none. It was thoroughly washed using clean water and Hydrogen Peroxide then lavaged using tincture of Iodine. The dam was injected with 15000 mg Amoxicillin and 50 ml Dexamethasone at different sites intramuscularly. Green clay was then applied to facilitate healing. The operation lasted 45 minutes.

PROGNOSIS

Good



CASE 18: JANUARY 8TH 2014**MASAI MARA****SPEARED LION**

This was a one and half year-old lioness in a pride of about 20 lions, it was spotted in Bilashaka area of Masai Mara NR near Musiara Airstrip. The lioness was unable to walk and remained lying down all the time due to a long spear-head stuck on its right-front leg. The lioness was attacked at night by herdsmen who were illegally grazing in the reserve, the pride killed one of the livestock and thereafter they were attacked and stabbed by the herdsmen in retaliation.

**IMMOBILIZATION**

The lioness was captured by darting using 150mgs of ketamine Hcl combined with 150mgs of xylazine Hcl, it took about 6 minutes for the drug to take effect and the lioness was fully anaesthetized

EXAMINATION

The lioness was transferred to a cool shade under a tree and put on lateral recumbency. The lioness had been stabbed by a spear that went through the inter-metaphalangeal space causing soft tissue injuries. The spear was retracted manually and gently removed without inflicting further injuries

TREATMENT

The resulting wound was cleaned using clean water and 10% hydrogen peroxide followed by topical application of tincture of iodine and cloxacillin ointment. The wound was then sutured using 3.0 cat-gut suture simple interrupted

pattern, it was sutured on the dorsal and ventral side of the paw. The suture was made water-tight to ensure that there is no gapping fig. 2 below. Oxytetracycline spray was applied on the wound. Further treatment involved intramuscular injection of Betamox and dexamethasone.

PROGNOSIS

The lioness was in a stable health soon after treatment and has good chances of healing and full recovery. The spear only affected the soft tissues with no traumatic injury to the bones, hence quick healing is expected.



CASE 19: JANUARY 11TH 2014**AMBOSELI NATIONAL PARK****INJURED ELEPHANT**

An injured adult male elephant had been seen at the Oldare area for the last 3 days. He had sustained serious injuries on both front legs and walked with a lot of difficulty and lived near a swampy area.

**IMMOBILIZATION**

Etorphine Hcl(0.98%) (M99®) (Norvatis South Africa (Pty) Ltd) 18mg, in a 3 ml Dan - inject dart was prepared. Foot darting was carried out. Using a Dan inject dart rifle (Dan-inject APS, Sellerup Skowej, Denmark) the elephant was darted; he was immobilized after 12 minutes..

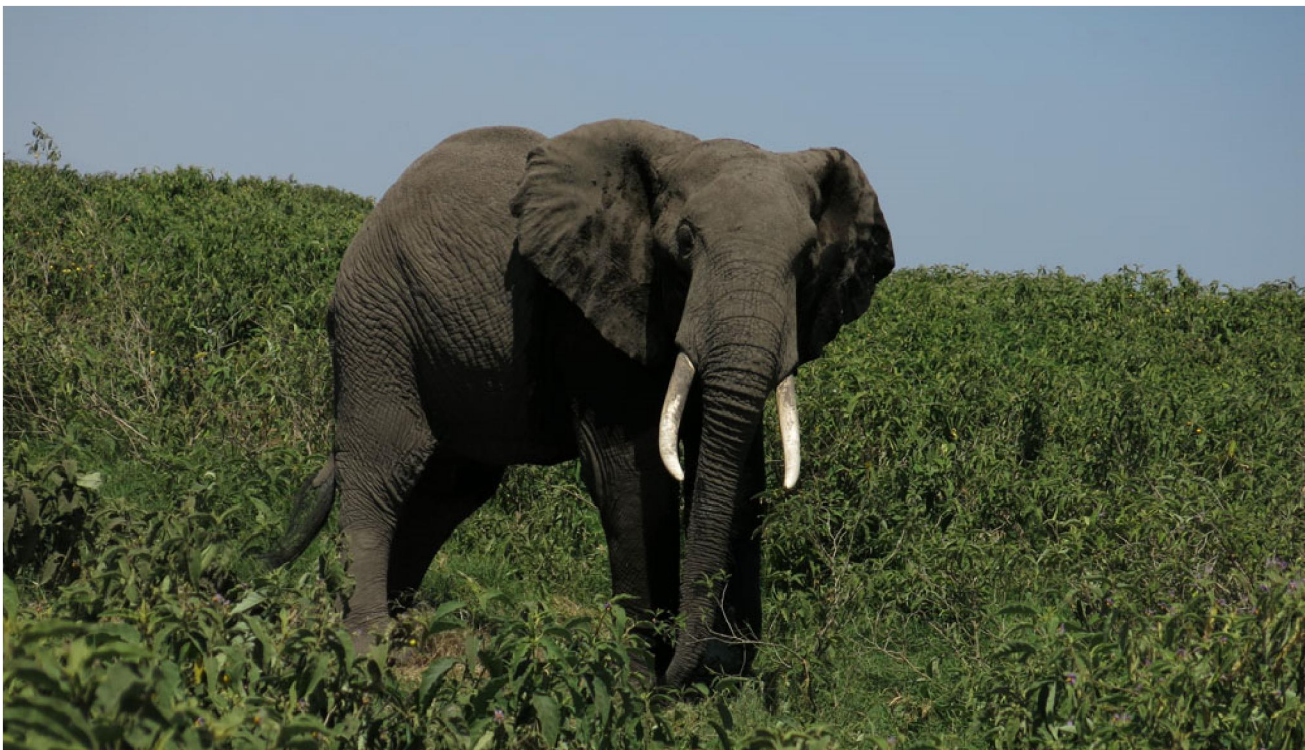
EXAMINATION AND TREATMENT

An open wound about 12cm in diameter on the medial aspect on the left front leg at phalangeal joints. The wound was deep enough such that the phalangeal bones were palpable. The wound was fresh with no pus exudate. There was another wound located on the medial aspect of right front leg, mid area of the radius and ulna region. This wound was purulent and had sharp edges. The wound was 5 cm wide and 4 cm deep. Some bone debris was removed from the first wound. Some dead tissues were also excised. The wounds were cleaned with copious amounts of water to remove mud and dirt, liberally

cleaned with Tincture of iodine. The purulent wound was cleaned with dilute hydrogen peroxide and again liberally cleaned with Tincture of iodine. Oxytetracycline spray (Norbrook Laboratories Ireland) was also applied. The wounds were also covered with green clay to promote faster healing.

PROGNOSIS

Guarded. Continuously monitor movement of the injured elephant. Repeat treatment is necessary after 5 days.



CASE 20: JANUARY 13TH 2014**MASAI MARA****INJURED ELEPHANT**

This elephant which had been treated 2 times, had previously suffered from an arrow head injury at the phalangeal area (ankle area).

**IMMOBILIZATION**

Etorphine Hcl(0.98%) (M99®) (Norvatis South Africa (Pty) Ltd) 18mg, in a 3 ml Dan - inject dart was prepared. Foot darting was carried out. Using a Dan inject dart rifle (Dan-inject APS, Sellerup Skowej, Denmark) the elephant was darted; he was immobilized after 14 minutes.

TREATMENT

An open healing wound about 6cm in diameter on the medial aspect on the right front leg at phalangeal joints/ankle area. The ankle was heavily swollen but the wound had a lot of capillary infiltration and granulation tissue, the wound was healing well. The injury has a possibility of progressing to osteoarthritis and stiff leg with some degree of lameness. The wound was cleaned with copious amounts of water to remove mud and dirt, liberally cleaned with Tincture of iodine. Oxytetracycline spray (Norbrook Laboratories Ireland) was also applied. The wound was also covered with green clay to promote faster healing.

PROGNOSIS

Good

CASE 21: JANUARY 13TH 2014**MASAI MARA****ELEPHANT AUTOPSY**

An adult male elephant was reported dead at Olkinyei Conservancy – Operik area and KWS security moved quickly and recovered 2 tusks for safe custody.

**EXAMINATION**

A dead male elephant in excellent body condition, (body condition score of 5) (scores 1=very poor, 2 = poor, 3=fair, 4=good, 5=excellent) . The elephant carcass was lying on right lateral recumbent position. The 2 tusks had been excised by KWS security personnel for safe custody.

FINDING

- i. A stab/penetrating wound about 6cm wide and deep into the muscles of the right flank directed to the position of the right kidney.
- ii. Clotted blood on the point where the tusks had been recovered. Differential diagnosis of anthrax ruled out.
- iii. Serum oozing from the stab wound area.

CAUSE OF DEATH

Circumstantial evidence provided by physical examination - a small stub wound indicated that the elephant was speared with a poison laced spear/ sharp object and consequently died of related poisoning complications.



CASE 22: JANUARY 18TH 2014

AMBOSELI NATIONAL PARK

INJURED ELEPHANT

This report describes a clinical intervention of one injured bull elephant at Amboseli National Park. This case was attended on Sky Vet initiative. This is a repeat treatment after the first treatment at the Oldare area on 11th January 2014. The elephant had moved less than 10 Kilometers for 7 days and was living close to a water point.



IMMOBILIZATION

The injured elephant was found on lateral recumbence position on the ground; he was in pain and tried to relief pain by sprawling down. However, he was strong enough to rise up and walk away. Etorphine Hcl(0.98%) (M99®) (Norvatis South Africa (Pty) Ltd) 17mg, in a 3 ml Dan - inject dart was prepared. Vehicle darting was carried out. Using a Dan inject dart rifle (Dan-inject APS, Sellerup Skowej, Denmark) the elephant was darted; he was immobilized after 10 minutes.

EXAMINATION & TREATMENT

An open wound about 15-20cm in diameter on the medial aspect on the left front leg at phalangeal joints. The wound was deep enough such that the phalangeal bones had been exposed and had deep seated pockets of pus. The wound was heavily contaminated and was suppurative. There was another wound located on the medial aspect of right front leg, mid area of the radius and ulna region. This wound was also purulent and had sharp edges. The wound was 5 cm wide and 5 cm deep. Some dead tissues were also excised. The wounds were cleaned with copious amounts of water to remove mud and dirt. The wound was also cleaned with normal saline and again liberally cleaned with Tincture of iodine. Oxytetracycline spray (Norbrook Laboratories Ireland) was also applied. The wounds were also covered with green clay to promote faster healing.

PROGNOSIS

Poor prognosis as the phalangeal or ankle joint is heavily inflamed and infected. The pyogenic wound is an open large wound exposing the phalangeal bones and the joint is open and heavily contaminated. Recommendation: Continuously monitor movement of this injured elephant. If not much improvement is noticed, a decision can be made to euthanize this elephant.



CASE 23: JANUARY 28TH 2013**MASAI MARA****INJURED LION**

This was an adult lion in a pride of about 15 lions; it was sighted with a deep stab wound through the thoracic wall. The wound was still fresh and bleeding, the lion was covered with blood stains on the shoulder and abdomen. By the time it was spotted, the lion was in intensive pain and was moving slowly towards the shade. The cause of the injury could not be immediately established but it could have been an arrow wound, spear wound or a gun shot from unknown attackers.

**IMMOBILIZATION**

The lion was anaesthetized by darting using 300mgs of ketamine combined with 4mgs of medetomidine, it took about 5 minutes for the drug to take effect and it was fully anaesthetized.

EXAMINATION

The lion was transferred to cool shade under a tree and put on lateral recumbency. It had two large gapping wounds on both sides of the shoulder. Both the wounds were fresh and penetrated into the thoracic cavity. The wound on the right side was small and rounded while the wound on the left side was a large slit piercing through the inter-costal space. The weapon is suspected to have hit the animal on the right side and exited on the left side.

The thoracic cavity was explored by hands and using long forceps and revealed that all the vital organs within the thoracic cavity were not injured and were still functioning normally. There was no foreign material floating within the thoracic cavity, the diaphragm was not punctured and remained intact.

TREATMENT

Blood clots were removed from the thoracic cavity and the wounds cleaned with a lot of clean water. The wounds were then sutured using 3.0 cat-gut suture simple interrupted pattern starting with the subcutaneous pectoral muscles followed by suturing the skin. The suture was made water-tight to ensure that there is no gapping or wound dehiscence. Cloxacillin ointment was applied on the wounds followed by green clay and oxytetracycline spray. The lion was further treated by intramuscular injection of Betamox and dexamethasone..

PROGNOSIS

The lion was stable after treatment and had good chances of healing and full recovery since all the vital organs were not injured and the wounds were sutured before infection set in.



CASE 24: JANUARY 28TH 2013**MASAI MARA****INJURED ELEPHANT**

An adult male elephant was sighted with a small traumatic injury on the right flank; the elephant was weak, lethargic and reluctant to move. It was first sighted by the rangers from Naiboshio Conservancy who reported immediately to the veterinary unit in the Masai Mara. The veterinarian was immediately flown to Naboshio conservancy to examine and treat the elephant through the support of the Sky Vet initiative.

**IMMOBILIZATION**

The elephant was found standing under a shrub in the conservancy. It was then immobilized by darting using 17mgs etorphine hydrochloride delivered by Daninject dart gun. Soon after darting the elephant moved for about 50 meters and stopped. The drugs took effect after about 5 minutes and the elephant went down on lateral recumbency.

EXAMINATION AND TREATMENT

The elephant was quite emaciated evidenced by its sharp spine and sunken crest. It had a small wound on the right flank which was full of pus, there was no foreign material in the wound.

It was suspected that the elephant was stabbed by a poisoned arrow and was suffering from the effect of the poisonous chemical. The poison could not be identified on the spot and further investigations will be conducted to confirm the chemical involved.

The wound was flushed and cleaned using a lot of water, 10% hydrogen peroxide and tincture of iodine then later filled with a paste of green clay until it was completely covered. The wound was then sprayed with oxytetracycline spray.

PROGNOSIS

Prognosis was guarded since the elephant had lost much of its body condition and was suffering from the effects of unknown poison.

