



**KENYA
WILDLIFE
SERVICE**



SKY VET QUARTERLY REPORT

MAY TO JULY 2014

FROM THE DAVID SHELDRIK WILDLIFE TRUST
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MAY 2014 - JULY 2014



SKY VET QUARTERLY OVERVIEW

During May to July 2014 the DSWT/KWS Sky Vet program was called to handle 13 wildlife cases, predominantly from the Masai Mara ecosystem, with 1 case in the Laikipia region of northern Kenya and 2 cases within the Tsavo Conservation Area.

Of the 13 cases treated during this reporting period 7 were elephant treatments, 3 lion, 1 zebra, 1 black rhino and 1 giraffe. Eight of these cases were caused by poaching including predominantly poisoned arrow cases as well as a number of spear injuries, involving 6 elephants.



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



CASE 1: MAY 2nd 2014**MARA NORTH CONSERVANCY****WOUNDED ELEPHANT**

Species African Elephant
Age Adult

Sex Male

**INTRODUCTION**

A male elephant was reported with a lame right hind limb within the Chali area in Mara North Conservancy and on arrival the veterinary team made the assessment that the bull still had moderately good body condition with slight signs of emaciation, yet the right hind limb was also swollen and oozing pus.

CHEMICAL IMMOBILIZATION & TREATMENT

The elephant was immobilized using 9.8mg of Etorphine hydrochloride. Diprenorphine was used for revival after the treatment. The elephant's swollen hind limb was examined and the swelling was full of pus, yet no foreign objects were found in the wound or no other external anomalies were noted. Hydrogen peroxide was used in debridement of the infected parts of the wound. Local infiltration of the wound with amoxycilin was done to reduce the bacterial load. A 100ml of Amoxycilin was administered intramuscularly. Calvasone 20ml, Multivitamin and 12ml (1800mg) of Clindamycin were also administered intramuscularly. Two cuts were made on the wound to allow pus drainage.

PROGNOSIS

The elephant was given a positive prognosis and the rangers within the area were tasked with monitoring its movements to ensure a good recovery.



CASE 2: MAY 3RD 2014**MASAI MARA****INJURED LION**

Species
Age

Lioness
Adult

Sex

Female

**INTRODUCTION**

A female lion was reported lame at Kifuko ya Kuluo in Olchoro-Ouriua conservancy in the Mara. The lioness was accompanied by 2 male cubs, which were approximately 3 years old.

IMMOBILIZATION

The lioness was darted using a combination of 300mg Ketamine and 1.5mg Dexmedetomidine. The lioness was observed to take a long time to get to complete immobilization; a second dart using 150mg ketamine and 0.75mg dexmedetomidine was used with little result. Attempts to re-dart the lion with a third dart was hampered by darkness. Efforts to try to immobilize the lioness in the following morning were not successful as she becoming increasingly hard to approach. The lioness disappeared into a thicket after being trailed by rangers and could not be traced again.

CONCLUSION

The lioness had a lameness that did not prove to compromise her health. The difficulties in her capture were evident of her strength and active nature despite the lameness. Close monitoring of the lioness and that of the lion cubs will be required in order to ascertain their health and survival despite the fact that, naturally, the lion cubs would be provoked to hunt on their own incase of severe hunger.

CASE 3: MAY 8TH 2014

TSAVO WEST, NGULIA

INJURED ELEPHANT

Species
Age

Elephant
Adult

Sex

Male

**INTRODUCTION**

A huge bull was seen by the DSWT pilot near Ngulia Rhino sanctuary limping and moving with difficulty. Close observation revealed the bull had lameness of the front limb. Due to the heavy undergrowth helicopter darting was the most viable alternative.

The chopper was secured early in the morning of 8th and a fixed wing plane was used to locate the injured bull. 18 mgs of etorphine was used to immobilize the elephant from a helicopter. The elephant went down in 7 minutes. Vehicles had a difficult time reaching the area and the vet had to be dropped nearby to monitor the immobilized elephant before the rest of the team could reach the area.

TREATMENT & PROGNOSIS

The left front limb was swollen, cold in the extremities and had an arrow like injury on the medial side near the armpit. The wounds were cleaned with hydrogen peroxide mixed with water, splashed with tincture of iodine and oxytetracycline spray. A coat of green clay was used to cover the injury. Long acting antibiotics was administered to cover from bacterial infection and painkillers injected.

Due to the cold extremities, a sign of poor or interrupted blood supply to the limb, a poor prognosis of healing was given.

CASE 4: JUNE 3RD 2014**MASAI MARA, MUSIARA****INJURED LION**

Species
Age

Lion
Adult

Sex

Male

**INTRODUCTION**

A male lion in the Musiara location in the Bila Shaka river bed was treated on the 3rd June. He had a torn scrotum which was presumed to be from a fracas with three lionesses. He was first seen in the early morning hours of Sunday on 1st June on the short grass plains that is known as 'Topi' plains.

EXAMINATION AND TREATMENT

The male lion was darted at approximately 12.25 pm with the operation finishing at 1.55 pm. The left damaged testicle was removed, before the lion was treated with an antibiotic and the scrotum was then stitched back.

REVIVAL & PROGNOSIS

The lion was revived successfully from the operation and has since been monitored by the local conservancy rangers and follow-up reports reveal he is recovering well from his injuries.

CASE 5: JUNE 6TH 2014**MASAI MARA, SERENA****INJURED LION**

Species
Age

Lion
Adult

Sex

Male

**INTRODUCTION**

The lion was reported to be lame and unable to hunt, it was carrying lameness on the left front leg. It had been lying down under one tree for at least 3 days without much movement. It required some examination and veterinary intervention to save its life.

ANESTHESIA AND TREATMENT

The lion was anaesthetized using 3.5 mgs medetomidine Hcl combined with 350mgs of xylazine Hcl and it took 15 minutes for the drug to take effect. The lion was examined and found with several deep penetrating wounds cutting through the interdigital space of the front left leg. It was suspected to be bite wounds out of territorial fights. The leg was intact with no fracture or dislocation.

SURGICAL OPERATION

The injured leg was then cleaned properly using 10% hydrogen peroxide and lugol's iodine, then sutured using chromic cat-gut number 3. The surgical wound was then treated using opticlox[®] ointment, oxytetracycline spray and green clay. Further treatments using Pen-strep[®] and dexamethasone were administered intramuscularly. The lion was then revived from anaesthesia after 1 hour using atipamezole Hcl administered intramuscularly.

Prognosis was good after treatment and the lion was out of pain.

CASE 6: JUNE 6TH 2014**MASAI MARA****INJURED ZEBRA**

Species
Sex

Zebra
Female

Age

Adult

**INTRODUCTION**

Soon after treating the lion at Serena, the veterinary team was called to go and rescue a female zebra with an arrow sticking into its back near Kawai area over the Oloololo escarpment. The case was reported by the Mara conservancy rangers and community living in the area. The zebra was in great pain and was still bleeding.

IMMOBILIZATION & TREATMENT

The zebra was darted from a vehicle using 5mgs of etorphine Hcl combined with 80mgs azaperone and the drug took effect after 5 minutes. The arrow head was excised carefully using a surgical blade while controlling hemorrhage using hemostatic forceps. The arrow-head had hooks which were cutting through blood vessels and muscles as it came off. This led to intense hemorrhage which took some time to control using several gauze swabs. The wound was then treated using green clay, oxytetracycline spray and opticlo^x ointment. Further parenteral treatment using long-acting oxytetracycline and dexamthasone was administered. The zebra was then revived from anaesthesia using 12mgs of diprenorphine Hcl administered through the jugular vein.

Prognosis was good after treatment and the zebra took off feeling relieved.

CASE 7: JUNE 6TH 2014**MASAI MARA****INJURED RHINO**

Species
Sex

Black Rhino
Male

Age

Adult

**INTRODUCTION**

The male black rhino was sighted with a very large circular wound on the right abdominal flank; the wound was infected and was being pecked by birds and full of flies and maggots. The rhino was in pain and dull preferring to lie down all the time. It had also started losing body condition and required urgent attention.

IMMOBILIZATION

The rhino was sighted in a swampy area close to Mara River near Little Governors. It was darted from a vehicle using 4.5mgs of etorphine Hcl combined with 80mgs of azaperone. It took off and ran for about 10 minutes then went recumbent. Respiration was stabilized using 10mgs of butorphanol administered through the ear-vein.



EXAMINATION AND TREATMENT

The wound was cleaned using a lot of water and gauze swabs attached to forceps to clear mud and necrotic debris. The wound was suspected to have been caused by filarial worms and later enhanced by pecking birds and flies. It was then treated by topical application of 10% hydrogen peroxide followed by lugol's iodine, subcutaneous injections of ivermectin around the wound to clear all the burrowing worms. The wound was then covered with green clay and oxytetracycline spray. Further treatments using Pen-strep® and dexamethasone were administered intramuscularly. It was then revived from anesthesia using 24mgs of etorphine Hcl administered through the ear-vein.

Prognosis; was good after treatment, the security rangers were advised to monitor the rhino and report the progress to the veterinary team.

CASE 8: JUNE 6TH 2014**MASAI MARA****GIRAFFE POSTMORTEM**

Species
Sex

Giraffe
Female

Age

Adult

**INTRODUCTION**

A female giraffe in a group of many other giraffes was sighted with an arrow-head on the stifle joint of the left hind leg, it had a young calf and it was already very weak almost collapsing. It died within a few hours after being sighted and the calf joined the rest of the herd.

IMMOBILIZATION & TREATMENT

The giraffe had an arrow-head stuck on the stifle joint. The joint capsule and muscles were heavily necrotized; the giraffe had lost body condition by the time of death. It was suspected to have been hit by a poisoned arrow.

The arrow and tissues samples around the wound were collected and submitted to the Government chemist for toxicological analysis. The calf was followed and observed but was found to be strong enough to survive on its own, it was not in any danger of predation since it was in a company of a large herd.

CASE 9: JUNE 6TH 2014

MASAI MARA

INJURED ELEPHANT

Species
Sex

Elephant
Male

Age

Adult



INTRODUCTION

There was a report of an elephant with two large swellings on the abdominal wall in Siana conservancy in the Masai Mara. The swellings were suspected to have been caused by an arrow or bullet wounds. The elephant was darted but unfortunately the drug did not discharge and the elephant escaped into the thick forest, several attempts to re-dart it were not successful as it kept on running through inaccessible thickets until darkness set in.

The security rangers continued to search for it the next day but they could not sight it. It was therefore left for the Mara resident vet to follow up and attend to it whenever it's sighted again.

CASE 10: JUNE 28TH 2014**TSAVO EAST; ITHUMBA****INJURED ELEPHANT**

Species
Sex

Elephant
Female

Age

Adult

**INTRODUCTION**

The DSWT pilot while on his normal aerial patrols spotted a nursing injured elephant in a herd of about 20 elephants in the Ithumba area. He made a report to the S.C .M.V.U based in Amboseli and immediately made plans to airlift the veterinary doctor to Ithumba. On arrival, the elephant was in a bush and it proved difficult to locate and dart her. However, while thinking of the next move, the elephant luckily moved to a watering point which was in open ground. The injury was accessed and a decision to immobilize the elephant for treatment was made.

IMMOBILIZATION

The elephant was immobilized using 17 mgs Etorphine Hydrochloride in a 3cc dart topped up using water for injection. Darting from a vehicle was done using Dan-inject system. Full immobilization took place after 17 minutes and she fell into a dog sitting position. The vehicle could not get an access route to the elephant so with the help of rangers the elephant was pushed to lateral recumbence while the trunk was maintained patent using a piece of stick placed across the nostril entrances. The ears were used as blindfold.

EXAMINATION & TREATMENT

The elephant was immobilized using 17 mgs Etorphine Hydrochloride in a 3cc dart topped up using water for injection. Darting from a vehicle was done using Dan-inject system. Full immobilization took place after 17 minutes and she fell into a dog sitting position.

The vehicle could not get an access route to the elephant so with the help of rangers the elephant was pushed to lateral recumbence while the trunk was maintained patent using a piece of stick placed across the nostril entrances. The ears were used as blindfold. **Prognosis** is good



CASE 11: JUNE 30TH 2014

MASAI MARA, OLARE OROK

INJURED ELEPHANT

Species
Sex

Elephant
Male

Age

Adult



INTRODUCTION

An adult male elephant was sighted with a spear-head stuck on its head just above the ears. The spear could be seen from far and the elephant kept on shaking its head attempting to drop it off. The elephant was sighted by the patrol team from Mara North conservancy who called the veterinary team to go and treat the elephant which was in great pain. The vet team was immediately flown from Nairobi through the support of Sky-Vet to attend to the case.

IMMOBILIZATION & TREATMENT

The elephant was darted using 18mgs of etorphine hydrochloride combined with 1500 i.u hyaluronidase. The drug took about 10 minutes to take effect and the elephant was immobilized. The spear-head was pulled out using a pair of pliers, it had hit the head on the rostral part and got stuck on the frontal sinuses, it never reached the brain. There was intensive hemorrhage following the removal of the spear. The bleeding blood vessel could not be retrieved for ligation so the hemorrhage was quickly controlled by use of gauze swabs stuck on the wound with a lot of pressure. Soon after the bleeding stopped, the wound was treated with Opticlox® eye ointment and green clay was used to cover the wound followed by oxytetracycline spray. The elephant was also treated with intramuscular injection using long-acting oxytetracycline and dexamethasone.

REVIVAL & PROGNOSIS

The elephant was revived from anaesthesia using 48mgs of diprenorphine Hcl administered through the superficial ear-vein. It rose up after about 3 minutes to join its friend. Prognosis was quite good after removal of the spear, the only risk was the recurrence of hemorrhage or the risk of uncontrollable internal bleeding.

The elephant was observed and monitored thereafter to ensure no hemorrhage occurred. The security team on the ground was advised to monitor it daily and report the progress to the vets incase further attention would be required.



CASE 12: JUNE 30TH 2014

MASAI MARA, OLARE OROK

INJURED ELEPHANT

Species
SexElephant
Male

Age

Adult

**INTRODUCTION**

This elephant had a deep penetrating spear-wound through the left thigh muscles, the limb was swollen with light hemorrhage from the wound. This elephant had been attacked at the same time as the previous case by poachers.

IMMOBILIZATION & TREATMENT

The elephant was immobilized by darting using 16mgs of etorphine Hcl combined with 1500 i.u hyaluronidase. Examination by palpation and metal detector revealed no foreign body in the wound. The wound was adequately flushed with a lot of clean water followed by 10% hydrogen peroxide, then treated using topical application of tincture of iodine and green clay. The elephant was also treated with intramuscular injection using long-acting oxytetracycline and dexamethasone.

REVIVAL FROM ANAESTHESIA

The elephant was revived from anaesthesia using 36mgs of diprenorphine Hcl administered through the superficial ear-vein. It rose up after about 2 minutes and took off to join its company.

PROGNOSIS

Prognosis was good after treatment, it was only a soft-tissue injury which will easily heal. Both elephants will be monitored by the security patrol team in the area and report the progress of recovery.



CASE 13: JULY 3RD 2014**LAIKIPIA WEST; LOISABA****INJURED ELEPHANT**

Species
Sex

Elephant
Male

Age

Adult

**INTRODUCTION**

On the 3rd of July the DSWT received a report from Space for Giants and Loisaba Ranch in Laikipia about an elephant bull with a spear lodged in his head.

IMMOBILIZATION & TREATMENT

Dr. Rono together with a Loisaba scout got close enough to the elephant undetected in order to dart him. After a successful shot the bull eventually slumped onto his haunches and the team moved in to ease him onto his side. Dr. Bernard Rono began pulling at the spear which was firmly lodged in the bull's head, and everyone present was horrified to see how deep it had penetrated. Once the spear was removed there was some haemorrhaging from his trunk, but not as much as expected. His wound was treated and long acting antibiotics were administered.

When the vet was satisfied with the completion of the treatment a revival antidote was administered and the team watched on proudly as he rose to his feet. He appeared absolutely fine and slowly ambled off into the undergrowth.

PROGNOSIS

A report from the Space for Giants Researcher based within western Laikipia who helped with the treatment, has confirmed that this bull is recovering remarkably well from his horrific injury having been sighted recently showing great signs of improvement.

