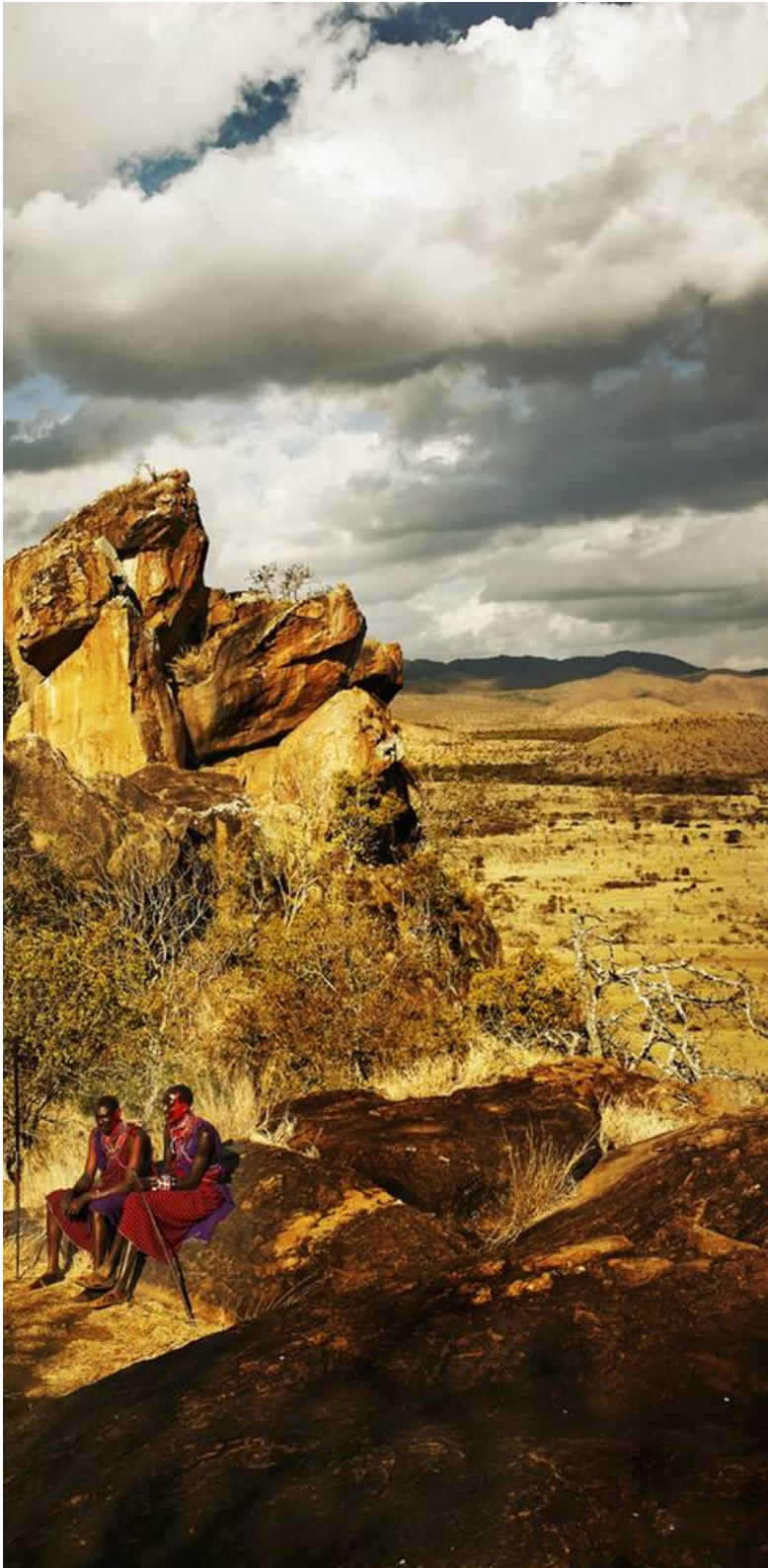




ANNUAL REPORT 2015



OUR MISSION

The Maasai Wilderness Conservation Trust works to protect the legendary ecosystems and astounding biodiversity of East Africa through conservation that directly benefits local Maasai communities.

MWCT's efforts are focused on the Maasai communities and landscapes of Kenya's Chyulu Hills, within the world-famous Amboseli-Tsavo Ecosystem. Within this land lie critical wildlife migration corridors and habitat reserves, forests that are carbon sinks, and rivers and springs that supply the fresh water not only to this ecosystem, but to more than 7 million people across Kenya, including the second largest city.

MWCT funds and operates programs and projects that promote sustainable economic benefits from conserving this ecosystem, working with communities to create innovative and dynamic natural resource conservation models that support human development goals through tangible economic benefits.

Through 3 major areas - Conservation, Education, and Health - MWCT helps protect the environment as a whole, encouraging the active participation of just 17,000 people in the stewardship of an ecosystem that extends over 280,000 acres and is critical to Kenya's future.

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INTRODUCTION

From Luca Belpietro, Founder and Executive Director

2015 has been a year of remarkable achievements for MWCT, in spite of the huge challenges. Kenya was faced with its worst tourism crisis thus far, which resulted in significantly less funds for MWCT. Our Finance and Administration Director, Titus Muia, was able to close the year without a deficit and without having to scale down any of our running programs.

It is hard to summarize the tireless work of a team of 250 dedicated women and men, but if I have to mention the most significant achievements of 2015, they are -

The validation of the REDD+ carbon project, made possible by the personal financial support of MWCF President, Edward Norton. This process has solidified MWCT leadership in the project, landing to our Chairman, Samson Parashina, as the chair of the newly constituted Chyulu Hills Conservation Trust.

Decrease of poaching and illegal activities, due to both more patrolling (10% increase in walked distances covered by our rangers) and a deeper and more engaging involvement of the community at large. Only one elephant was poached (versus two in 2014), poaching incidents and consequently arrests decreased, incidence of fires significantly diminished (4 incidents in 2015 versus 7 in 2014).

Better animal husbandry: our pioneer Payment for Ecosystem Service in tourism, Wildlife Pays, is leading to better herding. An increased livestock population with an increased predator population did not result in higher predation. 1,258 predation incident in 2015, versus 1,374 in 2014 (8.5% decrease), with significantly less livestock killed (1,767 versus 2,037 the previous year, a 13% decrease). These amazing results are due to the negligence clause which considerably decreases the compensation paid for incidents caused by poor husbandry.

A joint operation with KWS lead to the arrest of a known elephant poacher (in 2014), who was sentenced to life in prison in 2015. This is a significant and unprecedented accomplishment, which will certainly work as a very powerful deterrent. In fact, in the aftermath of the sentencing more information about poachers was obtained, resulting in prevention of further poaching.

Thanks to a fundraiser lead by Rene Arakelian, a guest at Campi ya Kanzi, MWCT with Hon. Katoo and the Group Ranch Officials were able to secure 42 post secondary scholarships, with the \$18,000 raised. This remarkable support of young community members has strengthened immensely the relationship MWCT has with both the community and the elected leaders.

The Education Program had one of the most significant achievements ever: Iltal Kanzi Primary School recorded the best ever performance in the Kenya Certificate of Primary Education (KCPE) examinations among the Kuku Group Ranch schools. It managed to score an average mark of 312.24, a 35% improvement from its 2014 performance. Truly remarkable.

A 133% increase in community outreaches done by our Health team (56 in 2015 versus 24 in 2014), with a 57% increase of treated patients (1,291 patients treated in 2015 and 822 treated in 2014).

UNDP made MWCT a beneficiary of a Small GEF to start a network of WERCs (Wetland Ecological Restoration Catchments), paving the way to discuss a holistic grazing management plan for the entire Kuku Group Ranch.

Expansion of collaborations, 1) New Course, where with Luci Lights (solar powered lights) we engaged women and assisted in improving livelihoods, and 2) Naga to restore rangelands and create grass seeds banks and finally 3) Conservation International, to bring to fruition the REDD+ Carbon Project.

I wish to thank our amazing team of 250 Kenyans, all incredibly dedicated, our supporting Boards, and our passionate supporters.

A special thanks to Edward Norton, for his tireless engagement and support: Edward personally provided the funds for the validation of the REDD+ Carbon Project.

A very special thanks to:

- Our Chairman, Samson Parashina, for his passionate and dedicated engagement with the community,
- Our Finance and Administration Director, Titus Muia, for his ability to work with less resources than planned,
- Our Community Rangers Commander, Muterian Ntanin, for his impressive results in preventing and containing poaching,
- Our doctor, Gabriel Waari, for his dedication and tireless assistance to the entire community,
- And to Noeleen Livingstone, for her help in professionalizing our office team, improving our monitoring tools and overall dedication to our programs and special projects.

I look at 2016 with enthusiasm, welcoming MWCF supporting team of Sarah Sitts and Emma Finney, who will assist MWCT in Development and Communications.

This year we will work in keeping the poaching contained, in increasing our PES, in expanding our collaboration network and in bringing new long term non-philanthropic incomes.

Thank you all for a very successful 2015.

Luca Belpietro

MWCT Founder and Executive Director



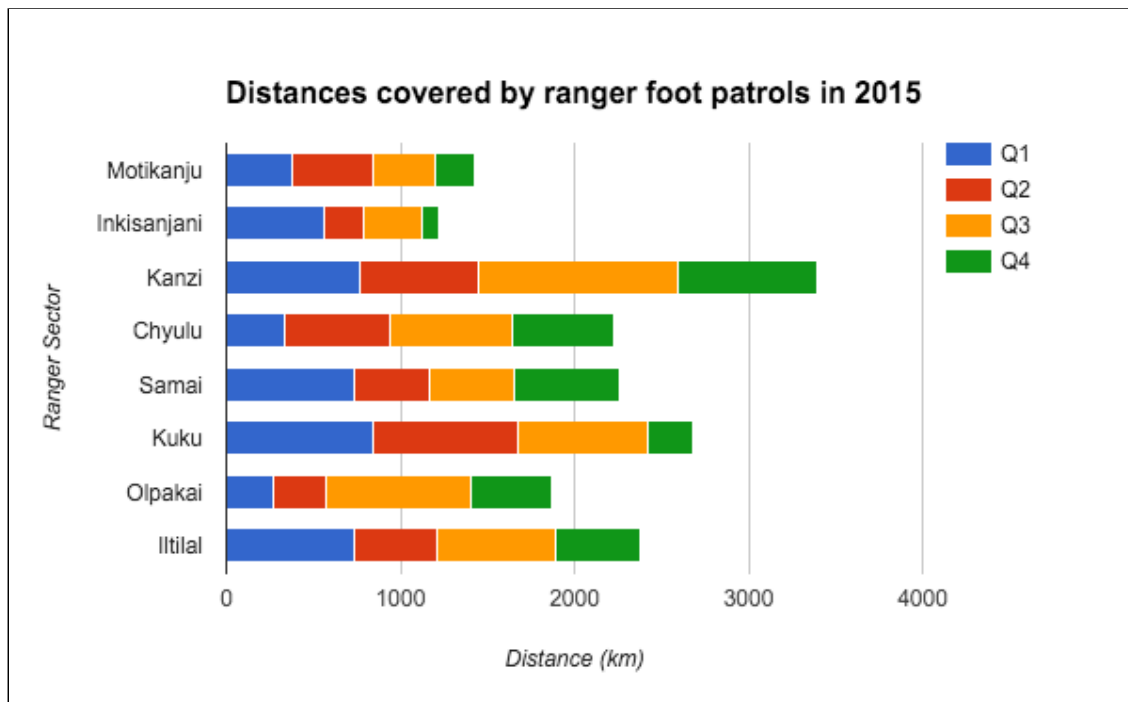
SECURITY

RANGER PATROLS

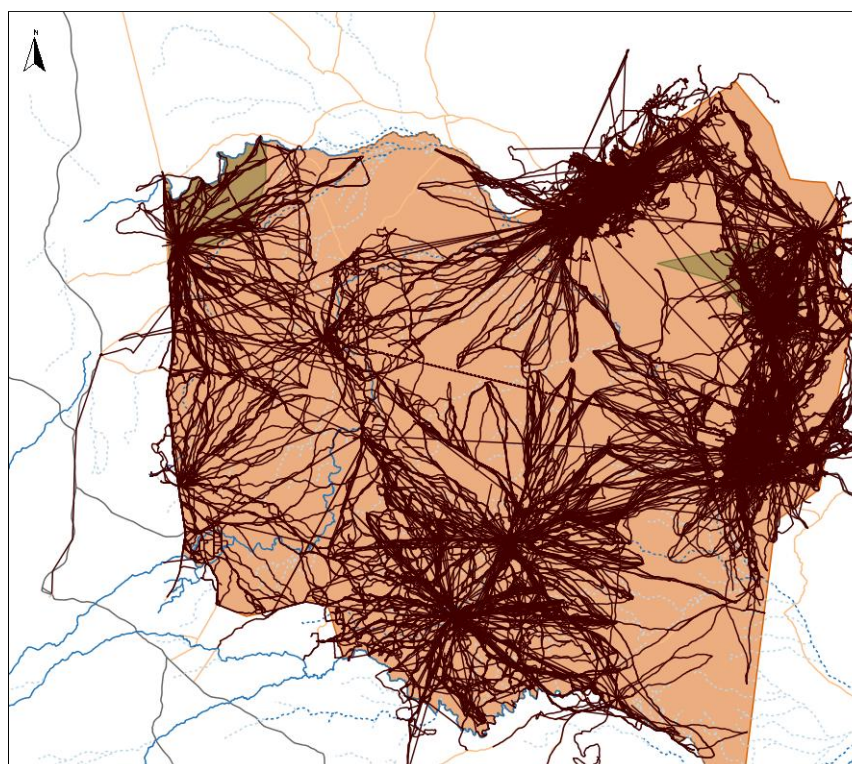
In 2015 MWCT Rangers covered a total distance of 17,463km while patrolling Kuku Group Ranch. The graph below shows the distances covered by each ranger sector during each of the four quarters in 2015.

In the fourth quarter the distances are lower because the Nexus tablets used by the rangers have started to fail. In some cases the failure is a result of dropping the device, in other cases the touchscreen is malfunctioning. While this does not prevent rangers from patrolling it results in fewer patrols being recorded and many rangers have found it challenging to go back to recording data using paper forms and GPS having been accustomed to using the tablet for many months.

At the end of 2015, The Zoological Society of London (ZSL) donated 11 smartphones which have been distributed to rangers to replace the tablets. We hope to see improved data recording and patrol distances in the first quarter of 2016.



PATROL COVERAGE



Patrol coverage for MWCT rangers in 2015. There is a noticeable gap in the south-east corner of the group ranch. We hope to set up a new ranger sector in this area in 2016 to support the Naga habitat restoration project.

ILLEGAL ACTIVITIES

POACHING & HABITAT DESTRUCTION

ACTIVITY	2015	2014	2013
Poaching Incidents	3	13	19
Wildlife Poisoning	8	1	1
Charcoal Burning & Wood Logging	9	20	14
Illegal Fires	4	7	4

Charcoaling was the most prevalent illegal activity on Kuku Group Ranch in 2015. A total of nine incidences of illegal charcoal production were discovered by MWCT rangers leading to ten arrests. This is a significant decrease of 57% between 2015 and 2014 in charcoaling incidents.

A single case of elephant poaching was recorded in 2015, where the tusks were recovered from the community, however the poacher remains unidentified despite investigations by both MWCT and KWS Rangers.

Poisoning of wildlife resulted in the deaths of one adult lioness, two jackals, four hyenas and one porcupine in 2015.



PROSECUTIONS & ARRESTS

Past 3 Years Comparison

	2015	2014	2013
Arrests (Total People)	14 (25)	32 (58)	22 (46)

2015 Arrest Activity by Category

ACTIVITY	Arrests	Total People
Wildlife & Bushmeat Poaching	5	10
Wildlife Poisoning	1	1
Charcoaling	9	15
Illegal Logging	1	2
Water Diversion	1	1



Convicted ivory poacher Parmuya Mulunga with MWCT Rangers upon his initial arrest in September 2014

POACHING

On the 25th of August in 2014, MWCT rangers received a report from BigLife Rangers about people chasing elephants from Mbirikani into Kuku towards Olorika. An MWCT ranger in Olorika rushed to an observation point and observed 5 people hunting elephants. A joint team of MWCT and BigLife Rangers tried to arrest the suspects, but the poachers fled the area after killing one adult male elephant, fortunately not having enough time to take the tusks.

On the 20th of September 2014, MWCT rangers managed to arrest the leader of the poachers, Parmuya Mulanga, and handed him over to the police station of Mtito Andei, where the suspect was arrested and taken to court. It took many court dates throughout 2014 and 2015 until the suspect was finally tried. In **November 2015**, Parmuya Mulanga was found guilty and sentenced to life in prison (the other option being a fine of 30 million shillings equivalent to \$300,000 USD). MWCT believes this successful result will be a warning to other poachers and help keep our elephants and other wildlife safe.

POISONING

Lion predation issues in the Centre/Oltiasika area were prevalent in the first half of the year, due to the construction of a new borehole in December of 2014. The borehole was constructed near the lava fields where lions usually rest during the day, thus causing a massive encroachment of lions and livestock.

An operation was conducted by MWCT Community Rangers and Simba Scouts in April to chase away the collared lions Namunyak and Lopolosi from the area. A multiple-day operation proved to be successful as both lions have no longer been involved in a livestock predation incident. Continual monitoring of these lions took place by Community Rangers and Simba Scouts in the area.

On April 18th, late in the evening one cow was predated and killed by a female lion in the area of Oltiasika. On the morning of the 19th, an MWCT Verifying Officer went to verify the predation claim.



Unfortunately, the following evening, the owner of the cow returned to the carcass and poisoned it with a chemical known as furadan. This poisoning resulted in 1 adult lioness, 1 jackal, and 4 hyena mortalities. MWCT immediately organized an operation with KWS and arrested the suspect, to then be transferred to Mtito Andei Police Station. Court proceedings continued under KWS, resulting in the eventual release of the suspect on community service by KWS. Very disappointing...

HUMAN-WILDLIFE CONFLICT

This year saw an escalation of human wildlife conflict, mainly due to the abnormal rainfall pattern in the ecosystem. While Kuku Group Ranch receiving decent rains, the rest of the ecosystem did not, causing a higher density of livestock and wildlife, coming from near by Group Ranches.

Poaching, while escalating in the rest of the country, and skyrocketing throughout the continent, has been well contained in Kuku. Only 1 elephant was poached (while in 2014 two were poached) and 1 had to be put down because of the killing of a woman.

Predation by our increasing lion population was intense in a particular area, due to a new well which brought livestock closer to lion resting places. A challenging situation which unfortunately resulted in the killing of a lion. While always unfortunate to lose a member of a dwindling species, it is a viable loss (equivalent to 2%) considering the 280,000 acres of Kuku Group Ranch and a lion population estimated in approximately 50 adults. Last year two lions died in a fight. This year there was no evidence of natural mortality.

Regardless of high conflicts, the community has shown remarkable tolerance of problematic wildlife. Here follows a brief report of the main accidents.



A Maasai zone elder speaks with moran (young Maasai warriors), convincing them to abandon their lion hunt after a livestock loss in the community

WILDLIFE DEATHS

**Deaths include poaching, poisoning, and natural causes or unknown*

ANIMAL	2015	2014	2013
Lion	1	2	5
Elephant	5	3	1
Hyena	7	0	0
Leopard	1	0	0
Jackal	2	0	0
Porcupine	1	0	0
Giraffe	3	1	1
Hippopotamus	0	1	0
Cheetah	0	1	0

Due to the rainfall pattern here in Kuku, human-wildlife conflict increased in some areas. One lion was unfortunately poisoned, along with four hyenas and one jackal, from a single poisoned cow carcass. MWCT encountered only one case of elephant poaching. Another elephant unfortunately had to be put down by KWS after rampaging through a community and killing a local woman. One elephant was found dead likely due to an old crop raiding conflict, and the other two elephant deaths were by natural causes. Two hyena deaths were in self-defense of human and livestock life, and the seventh hyena death was indeterminable and likely due to natural causes. One male leopard was fatally speared upon breaking into a boma to predate on livestock. Two giraffes were killed for bushmeat and the suspects arrested, and the third giraffe was determined to have died of natural causes. A second jackal death was also from a case of poisoning. MWCT is extremely pleased to have had such a drastic decrease in poaching incidents, just 3 in 2015, down from 13 in 2014.

WILDLIFE PROTECTION

ACTIVITY	2015	2014	2013
Lion Hunts Prevented	4	2	10
Poaching Incidents	3	13	19
Snares Removed	0	28	8
Joint Patrols	4	3	9

SPECIES CONFLICT

ELEPHANTS

- ★ Low rainfall in neighboring areas caused many elephants to migrate into Kuku Group Ranch during 2015. From June, MWCT Rangers worked with rangers from Kenya Wildlife Service and BigLife Foundation, to perform continuous operations in Langata, Enkima, and Olorika to aid in the highly problematic area of elephant encroachment on farms. Despite the decimation of approximately eighty acres of agricultural plots, the Rangers prevented over 80 attempts of elephant encroachment.
- ★ On March 4th, an elephant in Iltilal killed a woman. One of MWCT Simba Scouts saw the solitary male elephant and warned community members about its presence in the area. Unfortunately, an hour after his observation the elephant killed a woman carrying a water tank just 50 meters outside of her boma. After the incident, MWCT Rangers rushed to the scene but were unfortunately unable to help the woman. MWCT consequently informed Kenya Wildlife Service, tracked the elephant and warned other community members to prevent further casualties. Unfortunately, permission was not granted to put the elephant down and this caused high commotion in the community. The day after the incident a community member retaliated and injured 3 other elephants. In an effort to not only protect other uninvolved elephants and to ensure the community and surrounding communities were safe from this rogue elephant, MWCT urged KWS to take action, and KWS had no choice but to put the elephant down.
- ★ On May 26th, a herder reported a dead elephant with the tusks missing in Iltilal. Rangers were deployed immediately and found a bull elephant with both tusks missing. An investigation found that the cause of death was an old spear injury which may have been inflicted during a crop raiding conflict. After sharing this information with the village elders, the 2 elephant tusks were successfully recovered from a local man from Iltilal. The KWS Community Wildlife Service Officer, Joseph Kisio, and KWS Assistant Director, Mr. Julius K. Cheptei were informed of the matter. Due to the tremendous efforts of MWCT, Mr. Julius Cheptei along with other representatives of KWS, travelled to CCRC to meet with MWCT President Samson Parashina, MWCT Operations Commander Muterian Ntanin, and the involved Community Rangers to discuss the incident, attend a community meeting, and officially hand over the tusks. The event was extremely successful and MWCT was honored to host such a meaningful gathering of key partners in the ecosystem to battle poaching.
- ★ In July, MWCT Rangers received information from the community that an Elephant had been speared at Olorika due to crop raiding conflict. The elephant couldn't be found, however it is likely to have survived the incident given the small injury incurred. Although the culprit was known by the community he fled the area and could not be arrested. On July 22nd, MWCT and KWS Tsavo Rangers conducted a community meeting. The meeting, where emphasis was placed on creating an understanding of the penalties existing under the new Wildlife Act, appropriate ways to scare away elephants from agricultural area, and appropriate community channels for communities to follow in case of issues regarding elephants or any other wildlife, was attended by approximately 150 people.

LIONS

- ★ A lion hunt was prevented in April in Kuku village. The hunt was instigated by the community after two cows were killed by a pride of eight lions in Kuku plains. A community meeting was held to address the issue, with the meeting attended by group ranch leaders and total of 38 men and 45 women. MWCT officers emphasised the importance of conserving these predators and successfully persuaded the community to call off the hunt.
- ★ Due to frequent lion predation occurring in the Oltiasika area, MWCT distributed Luci Lights to 17 problem area bomas to aid in mitigating predation on livestock. The lights are placed on the outside of the bomas and used with the flashing function to ward off predators.

OTHER WILDLIFE

- ★ In June, a male leopard was speared by an Ittilal community member as an act of self-defense, due to the leopard entering a boma to predate on goats. Upon further investigation, the leopard appeared to be significantly unhealthy at the time of the incident. KWS Rangers worked together with MWCT to collect the carcass from the boma and transport it as necessary. No further action was taken nor did any prosecutions occur, as the spearing was deemed to be an act of self-defense.
- ★ A hyena was speared by a community member in Samai, after the hyena had entered his boma and killed two goats. Instead of leaving the boma, the hyena continued to injure cows and community members inside the boma. The incident was reported to MWCT and investigated by Rangers and Wildlife Pays Verifying Officers. It was decided to be a clear case of self-defense.
- ★ A hyena was killed in Langata after attacking two children near a boma.
- ★ A porcupine was killed by farmers in Inkisanjani by poisoning goats bones with agricultural pesticides.



WILDLIFE PAYS

2015 SUMMARY

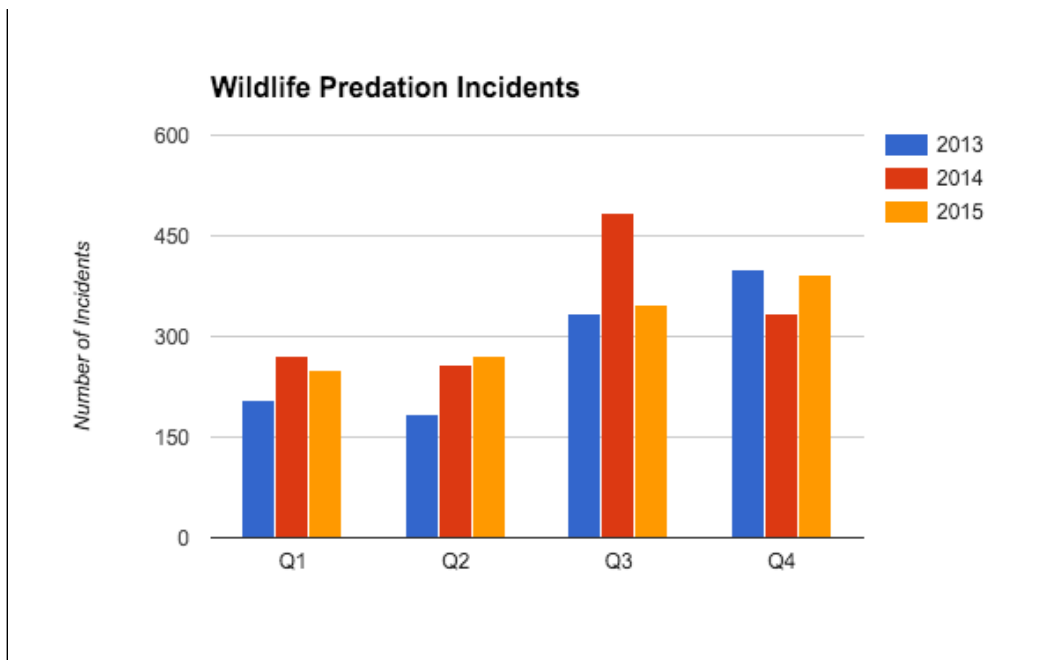
Livestock predation incidents were high during 2015 with the total amount of compensation going above the quarterly cap of 1.6 million Ksh in three of the four quarters.

On June 18th all MWCT Wildlife Pays employees gathered at CCRC to discuss continued employee morale and proper and effective field verification protocol. Wildlife Pays verifying Officer, Johanna, took all meeting attendees through a discussion that analyzed issues faced in the field in the verification of incidents, as well as understanding of the greater scope of MWCT programs.

In November, we had many cases where claims were made for sick or weak animals who were eaten by predators after they had died. A meeting was held on November 9th with our Verifying Officers and Zone Elders to discuss the problem. 30 of our 39 Wildlife Pays staff were present. We reviewed all of the cases and agreed on some steps we can take to address the problem.

TOTAL INCIDENTS

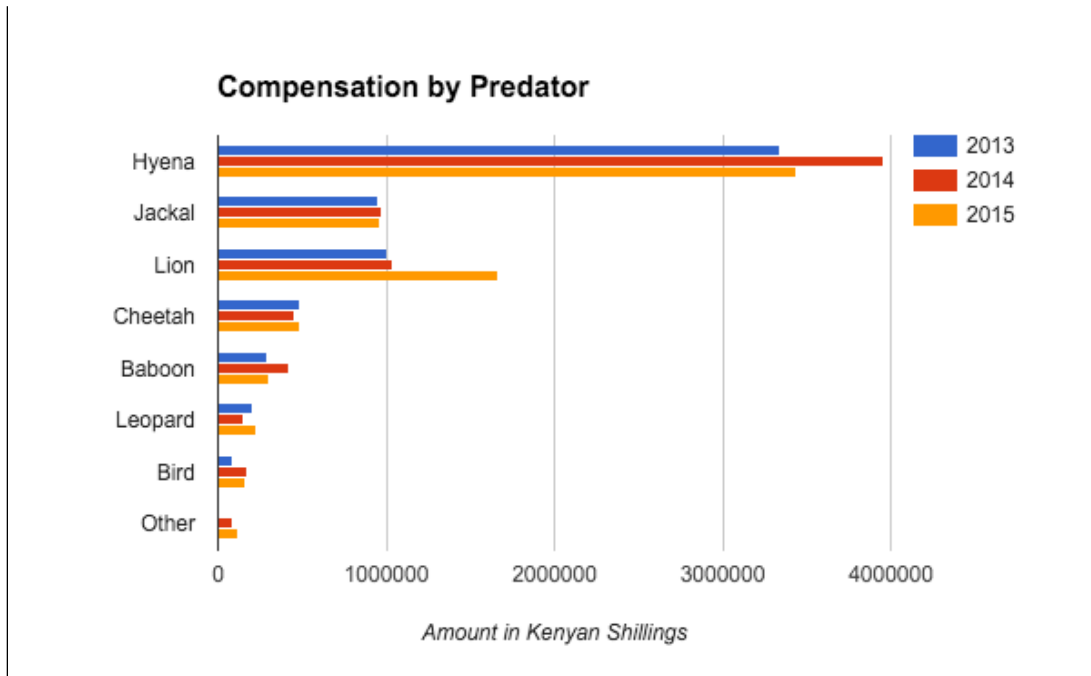
Total of **1258** incidents of livestock predation in 2015.



Year on year comparison of the number of Wildlife Pays incidents. Most claims are for a single animal (goat, sheep, cow or donkey) so the trend is similar to that for Heads of Livestock. There are some claims however where the predator has killed many animals in the same incident. In such cases we must examine the evidence carefully to prevent fraud and to check for negligence.

TOP PREDATORS

Most incidents were due to **Hyena** (503), followed by **Jackal** (285) and **Lion** (138)



Year on year comparison of the amount of compensation paid for various predators. Compensation for claims involving lions showed a marked increase in 2015 despite only a small increase in the number of livestock killed by lions. This is because lions tend to kill cattle rather than sheep or goats and the compensation amount is higher for cattle.

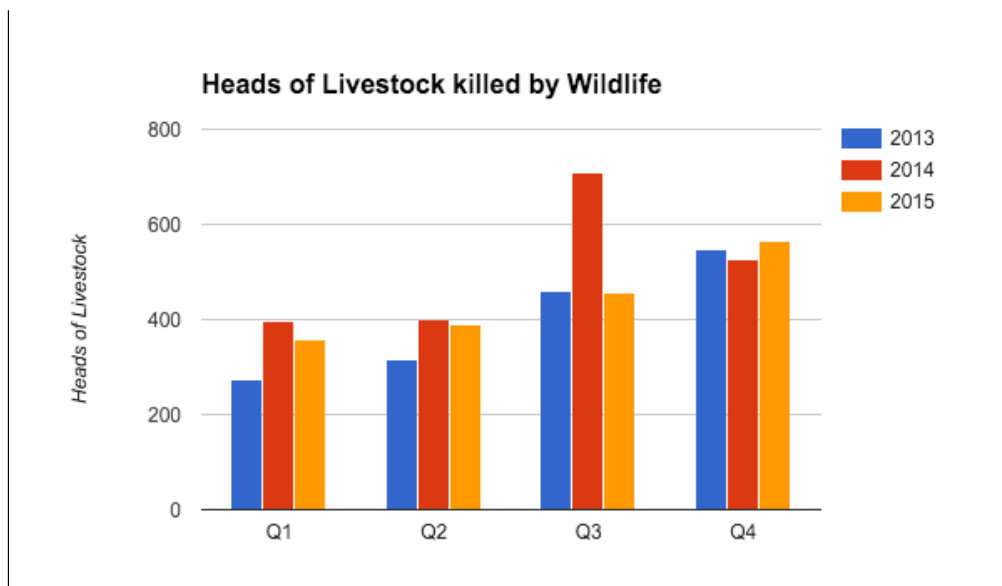


Photo credit: [A Peach](#) via [Foter.com](#) / [CC BY](#)

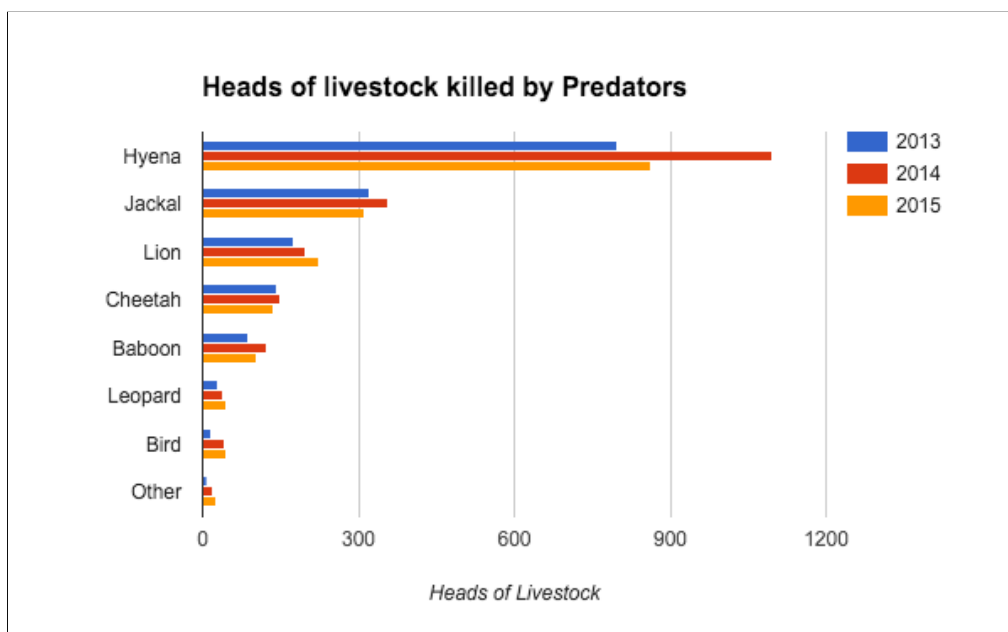
HEADS OF LIVESTOCK

Total of **1767** heads of livestock predated (326 cows, 524 goats, 891 sheep and 26 donkeys)

The most heads of livestock were killed by **Hyena** (864), **Jackal** (311), **Lion** (224) and **Cheetah** (137)



Year on year comparison of heads of livestock killed by wildlife. There were fewer heads of livestock killed in 2015 compared to 2014 but in Q4 we saw a small increase. As the rains started later than usual in October, grazing for livestock was very limited throughout October and much of November. Predators took advantage of livestock in their weakened state and we saw an increase in Wildlife Pays claims in Q4 until grazing areas started to recover after the start of the rains.

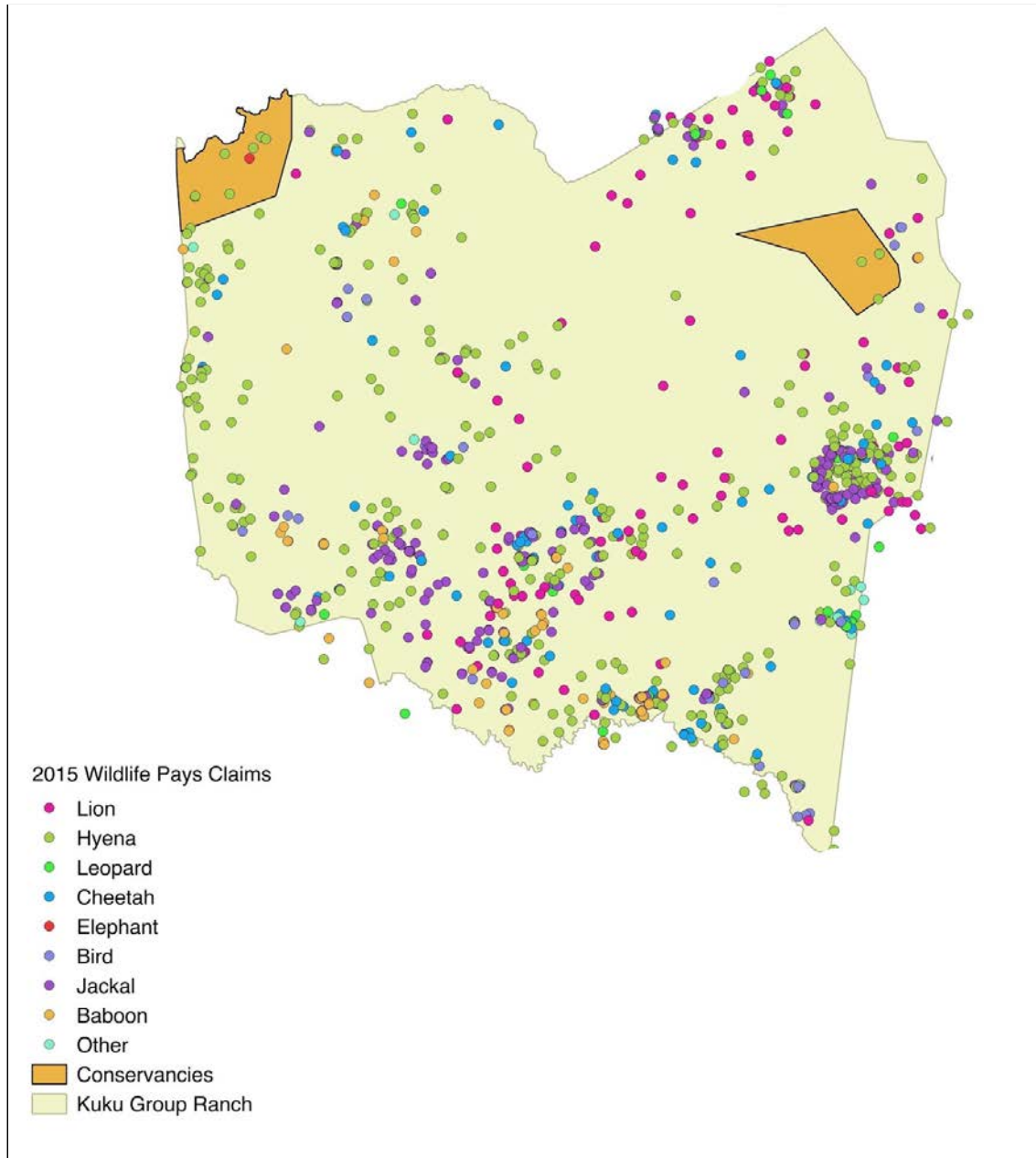


Year on year comparison of heads of livestock killed by various predators. Hyenas and Jackals again dominated in 2015 although not to the same extent as seen in 2014. There was a small increase in lion and leopard predation in 2015 and cases involving Cheetahs were fewer.

VALUE OF PAYOUT

The total amount paid out for Wildlife Pays in 2015 was **6,925,650 Ksh**. The quarterly cap of 1,600,000 Ksh was exceeded in Q2, Q3 and Q4 but not Q1.

2015 WILDLIFE PAYS CLAIMS



Map showing location of predation incidences on Kuku Group Ranch during 2015.

WILDLIFE RESEARCH

LION MONITORING

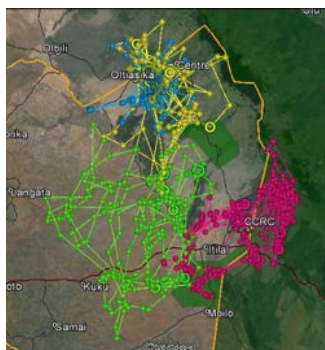
MWCT employs 14 Simba Scouts, young local Maasai warriors, to help us research and protect the lions within Kuku Group Ranch. In 2015 we continued to monitor our four collared lions: Lorpulosie, Namunyak, Normanie and Neluai.

- ★ Neluai, Normanie and Namunyak all had cubs in 2015. Neluai gave birth in January, Namunyak in March and Normanie in July.
- ★ In April an operation was conducted to encourage Namunyak and Lorpulosie to move away from the Centre/Oltiasika area as they were involved in numerous predation incidents making the communities there very frustrated. The operation was successful.
- ★ A lion collaring exercise was conducted on October 3rd and 4th. Both Normanie and Namunyak received new collars. Normanie was collared in the Ormani area around 5:00 in the evening. VHF Telemetry was used on her existing collar to determine her position. She was found feeding on a fresh Zebra carcass and the operation was easily conducted. Because the battery of Namunyak's GPS collar was no longer functioning, Lorpulosi's position was relied upon to determine her location. A calling station was set up and a group of 13 lions appeared, both Lorpulosi and Namunyak among them. The collaring of Namunyak went well and both lions' collars are continuing to function appropriately.
- ★ On 13th November, Lorpulosi's collar stopped working. It's almost two years since he was collared thus the battery is finished and the collar is no longer communicating with the satellite. The Simba Scout team carried out several tracking exercises using telemetry and found that the lion is moving frequently between Oltiasika and Campi ya Kanzi.
- ★ On 4th November 2015, Normanie together with two lionesses was involved in an incident where 13 goats were killed at Orkeri. This was discovered during a lion tracking exercise by the Simba Scout coordinator. Rangers were asked to assist as Normanie's GPS position was in an open place and very close to seasonal bomas.
- ★ On 23rd November 2015, Neluai was involved in the killing of one cow near Loonkito.

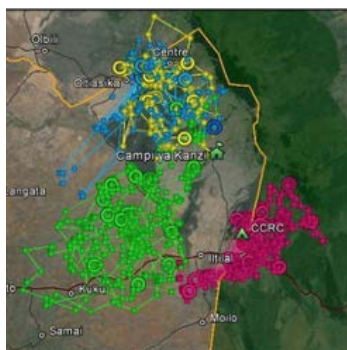


LION MOVEMENTS

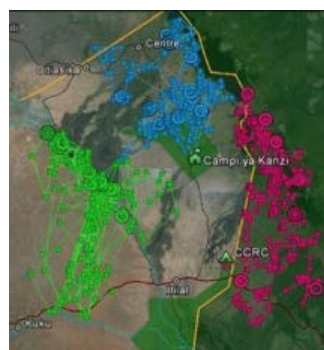
Quarter 1



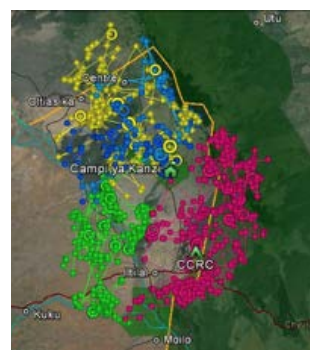
Quarter 2



Quarter 3



Quarter 4



Collared male lion, Lorpolosi, with one of his cubs, captured by a guest visiting our partner ecotourism lodge
Campi ya Kanzi

PROJECTS

CHYULU HILLS REDD+ CARBON PROJECT

The validation of the Chyulu Hills REDD+ carbon project started on the 25th of February with meetings in Nairobi with the law firm Guy Elms and Kenya Wildlife Service (KWS). On the 27th and 28th of February the SCS validators visited MWCT and validated community awareness and consent and carbon measurements on Kuku, Kuku A and Rombo Group Ranches. The Chyulu Hills REDD+ Carbon Project validation process was completed in the first week of March.

A meeting was held on August 22 to inform the community that the validation phase was successful and discuss the next step in the carbon development process: verification. A Carbon workshop was held at CCRC on October 27th and 28th. Group Ranch Officials and representatives from Big Life, Wildlife Works, Conservation International, African Wildlife Foundation, David Sheldrick Wildlife Trust and KWS were present. The verification process was explained and Wildlife Works and Conservation International shared their experiences on other REDD+ projects. Group Ranch officials expressed concern that the verification process would take a year making it challenging to keep the community engaged while they wait to see benefits from the project. A discussion on this topic followed and a number of ideas were put forward to address the issue.

The first board meeting of the Chyulu Hills Conservation Trust (CHCT) was held on October 28th. Prior to the meeting the board members were given an orientation where they reviewed the Deed of Trust and discussed best practices for how the trust should operate.



Group Ranch Officials gather at CCRC together with MWCT President, Samson, and Chris Tuite, consultant working on the Chyulu Hills REDD+ Carbon Project.

RANGELAND RESTORATION (HOLISTIC GRAZING PLAN)

Work is almost complete on our 'Holistic Grazing and Rangeland Management' project funded by the GEF Small Grants Programme. In January 2015 a NEMA certified scientist team from Nairobi University visited Kuku Group Ranch to conduct an environmental impact assessment for the development of the Wetland Ecological Restoration Catchments (WERCs). Technical designs for the project were produced and construction was completed on all three WERCs in October.

Work on the development of a holistic grazing plan started early in the year. MWCT, together with Natural Capital East Africa, held a series of holistic grazing management community meetings which sought to develop a holistic grazing management plan for the Kuku, Iltal and Oltiasika zones on Kuku Group Ranch. Grazing committees in the three zones divided their zones into grazing blocks and established which zone is to be grazed at what time of the year. Each grazing committee learned the difference between dry and wet planned grazing and how to calculate the grazing period for each block. They also created maps showing the locations of the grazing blocks within their zones.

A technical forage assessment was completed by NCEA to estimate the available forage for the dry season and this in turn determined how many animals are allowed to graze an area for a specified amount of time. Finally, to implement these ideas, a two day leader's workshop was held at CCRC on June 8 and 9, 2015. Group Ranch Officials, Group Ranch Committee, Local Chiefs, Zone Grazing Committees and MWCT Management Staff were all in attendance at the workshop. The purpose of the workshop was to extend a communal understanding of all grazing plans of each zone, and to discuss the way forward.

In order to improve our domestic water sources on KGR, five microwells were constructed in Iltal and Moilo during October and November. Construction of five cattle crushes to facilitate veterinary treatment of livestock is in progress and will be completed in early 2016.



Creating a microwell in Iltal.



Construction of a WERC in Olpakai.

GRASS SEED BANK

In Partnership with: Naga Foundation

Location: Moilo

In 2015 two Grass Seed Bank projects were undertaken by MWCT. The first, in Kuku, was sponsored by A New Course. Seeds were sown in February to take advantage of the rains in March and April and an electric fence was constructed to protect the project area from wildlife and livestock grazing. Unfortunately the project encountered some challenges in April when the fence was found to be almost completely knocked down by wildlife. It was determined that the power supply was inadequate for the fence, rendering it ineffective in keeping wildlife out. The project area is frequented by giraffes and zebras, hence an additional power supply is needed to facilitate high electric current flow. Low rainfall also hindered grass germination and many seeds were removed by pests.

The second grass seed bank project was sponsored by the Naga Foundation. On June 23rd, a community meeting was held in Moilo to propose the new collaboration with the Naga Foundation to community leaders and members. The project proposal was happily accepted by all community leaders and members and permission was given to commence with the project in the proposed area.

With the selection of the site for the Grass Seed Bank Project finalized in June we were able to move forward with planning and procurement of materials for the solar electric fence. Given the challenges we faced with the Grass Seed Bank in Kuku, some improvements were made on the fence design to help ensure the site is protected from wildlife.

The project was visited in early October and the corners of the area to be fenced were marked. Construction of the fence was completed in December and an askari was employed to guard it. On December 23 a group of women selected from the community received training by experts from KARI on the development of a grass seed bank for grass seed harvesting. These women were then employed to sow grass seeds at the project site. Ploughing and seed sowing were completed in late December.

In 2016 we hope to form a women's group to maintain and manage the grass seed bank. In this way the grass seed bank will provide sustainable ecological and social benefits to the community of Moilo.



The fence surrounding the grass seed bank.



Women sowing seeds in the grass seed bank.

WOMEN EMPOWERMENT

In Partnership with: New Course

In 2015 MWCT partnered with A New Course on three projects aimed at empowering women. The first was a Grass Seed Bank project in the first quarter of the year. This project is discussed above along with the Grass Seed Bank project sponsored by Naga. In late 2014 New Course donated a number of Luci solar lights, produced by MPOWERD, to MWCT to empower women of the local Maasai community on Kuku Group Ranch. The goal was to not only reverse the negative health effects from the kerosene lanterns traditionally used, but also to provide a platform for the women to establish an alternative income generating enterprise for themselves. By saving money from no longer purchasing kerosene, the women were able to contribute regularly to a project or enterprise or idea that would benefit them in a sustainable way. In 2015 more than 400 Luci Lights were distributed to women across Kuku Group Ranch. In October 2015 A New Course proposed a new project for the women's groups of Kuku Group Ranch. With Christmas approaching, A New Course had been able to secure orders for Christmas tree ornaments to be made by the Maasai women's groups. Six different designs were chosen and the women produced a total of 145 Christmas ornaments sold at 800 KSh. each.



Women get their first look at Luci lights.



Maasai women show off their beading work.



One of the women's groups who participated in the Christmas ornaments project.

HABITAT RESTORATION

In Partnership with: Naga Foundation

In 2015 MWCT began working with the Naga Foundation on a proposal for a new project to restore the habitat on Kuku Group Ranch. This project aims to increase the water availability for the resettlement of vegetation over an area of eight square kilometers thereby sustainably improving the productivity of the rangeland and increasing the resilience of the local Maasai community to climate change. On a larger scale the project will contribute to increased vegetation cover in the in the Tsavo-Amboseli ecosystem and positively influence the regional climate in the area.

Naga sent its representatives to visit CCRC at the end of September to do an analysis of the project area and experience the truth scenario on the ground. Four potential sites were identified and after consultations with the community in December two of these sites were approved for the project.

During his visit in September, Naga representative Sander de Haas recommended that we start by digging bunds in the project area to slow down the flow of water over the land and encourage vegetation growth. MWCT staff were trained in the creation of bunds and the NAGA/MWCT team also visited a recent project at Finch Hatton where bunds were created before the last rains. They observed how the bunds have handled the rain and found that they withstood the rains reasonably well but over-grazing has limited their effectiveness. It is clear that grazing management is a crucial part of the strategy of creating bunds for habitat restoration. Project implementation will begin in early 2016.



Naga Chief Technology Officer, Sander de Haas, demonstrates proper measurement for the bunds with the MWCT team.



The MWCT Team work together to construct a number of pilot bunds after they had received their training (left) and the finished product of the pilot bunds ready to receive the first rains (right).

HEALTH

The Maasai Wilderness Conservation Trust understands that complementary to environmental preservation is the need to address the health needs of communities living within the conservation areas. Based on this understanding, the MWCT health department was established and has two goals;

1. To improve access to quality health care.
2. To establish preventative health care system through education.

Towards meeting these goals the MWCT health team has made the following achievements in 2015.

HEALTH CARE ACCESS

Over the course of the past 12 months, the MWCT health outreach team comprising of the medical doctor, nurse and laboratory technician have conducted 56 outreaches to various sites within Kuku group ranch. In total 1291 patients were treated; these included 436 children under 5 years; who either received treatment or were vaccinated against preventable life-threatening illnesses. 200 women received prenatal examinations including a clinical breast exam and laboratory screening of congenitally transmissible infections such as HIV/AIDS and Syphilis.



A clinician reviews growth charts for children at an outreach.

Under our laboratory outreach program, the MWCT laboratory technician has a weekly schedule to two dispensaries; the nearest one approximately 20 kilometers away from his fixed lab at Iltilal Health centre. In 2015; he conducted 30 outreaches to these two sites and performed 418 discrete tests.

HEALTH CARE QUALITY

MWCT aims to consistently and progressively improve the quality and range of health services available to community members living in the Kuku Group Ranch. This year, MWCT has jointly with partners made several investments in the health facilities providing health services to the Maasai community. The diagnostic capability of the main laboratory at Ittilal health centre got a major boost with the installation of a semi-automatic biochemistry analyzer in January 2015. This machine will greatly enhance the follow-up of patients with chronic diseases such as HIV/AIDS, diabetes and hypertension in timely detection of liver and kidney derangements.

Additionally in September 2015, Dr. Jack Youredijan, an American pharmacist donated a major consignment of medicines and medical equipment including digital thermometers, blood pressure machines and nebulizers worth over USD 3500; that have been distributed to the various health facilities, greatly improving the care received by patients. MWCT has also partnered with the individual health facilities to carry out repairs and make improvements in their physical infrastructure including rain-water gutters, pharmacy counters and plastic chairs.



MWCT lab technician works with the biochemistry analyzer



Dr Jack presents medicines and equipment donated to the Ittilal Clinic.



Medication counter and chairs presented to the Kuku Clinic.

BREAST CANCER AWARENESS

MWCT has an enduring partnership with Susan G. Komen; an American nonprofit organization dedicated to saving lives and ending breast cancer, to promote breast cancer awareness and education among the local Maasai women. The health department has adopted a two-pronged approach in tackling this issue. The first approach is mediated by the health program staff; where they directly convene special meetings with community women to educate them on breast cancer prevention strategies. The second is by use of community health workers (CHWs); these trained community resource persons have scheduled presentations at the health facilities to educate clinic attendees on various women specific health issues. Their engagement with community is continuous as they are embedded within the community and are thus readily accessible by residents and share a common language.

In 2015, health staff educated 128 women on breast cancer. The community health worker led health education program (CHEP) reached 264 women with health educational topics including breast cancer. During the breast cancer month, MWCT co-organized the Loitokitok Half marathon and Youth health day to highlight breast cancer issues.



Various plenary and small group sessions on early detection and prevention of breast cancer.

SCHOOL HEALTH

According to the World Health Organization, an effective school health program can be one of the most cost-effective investments a nation can make to simultaneously improve education and health. This year, the MWCT health program has been implementing a health education and deworming program. The health education program focuses on adolescent reproductive health issues such as teenage pregnancies, HIV/AIDS, hygiene and sanitation. Reducing the prevalence of soil transmitted helminthes is a key concern of school health programs in Kenya; where studies have shown that 56.8 % of school-going children are infected. Heavy infestation has been associated with malnutrition, anemia, poor academic performance and absenteeism.

This year, the MWCT health team has visited 6 schools and reached 2,388 students.



Health workers deworm pupils during school visits.

ENVIRONMENTAL HEALTH

In line with MWCT's holistic approach to community health, MWCT has created a program for sensitizing residents at shopping centers on the dangers of careless garbage disposal on human health. There has been widespread use of non-biodegradable polythene bags and wrappers which when poorly disposed; offer breeding areas for parasites such as mosquitoes, ingestion by animals often leads to their deaths or when burning produce noxious and carcinogenic fumes. MWCT is sponsoring clean –up campaigns to in efforts to sensitize community members on the numerous dangers posed by haphazard garbage disposal. Two campaigns at the most populous centers have been completed.

Another focus of this environmental health program is education on how to make water safe for drinking and appropriate human waste disposal such as the use of latrines. The Moilo area owing to its low-lying and flood prone typography has been identified as a suitable intervention site. Dr. Gabriel in collaboration with the Public Health officer Mr. Ronald Musyoka visited this area assessing drinking water quality and presence of latrines. The culmination of this exercise was a community forum organized at the chief's office. The gathered community representatives were taught on the importance of protecting water sources and how to purify water before during drinking including the use of chlorine in domestic water tanks.



Community members participate in a clean-up exercise.

GOVERNMENT & PARTNER COLLABORATIONS

MWCT has striven to create effective collaborations with the governmental Ministry of Health and other non-governmental organizations working in the region. Apart from the Ministry of Health, MWCT is the only non-governmental organization that has health staff resident within Kuku Group Ranch and attached to health facilities.

It thus occupies a special niche in terms to directly interfacing with the health needs of the community. In leveraging this exceptional position, MWCT this year organized the inaugural Kuku Health Workers Forum that brought together health staff from all health facilities for a one day interactive forum to get feedback on 2014 health indices and strategize for the current year. Also present were representatives from the County Health Office and partner non-governmental organizations; Dorcas Aid International and Malteser International.

A sterling example of effective collaboration in health service delivery is the successful conduct of mass vaccination campaigns for the eradication of polio. Two cycles were held in 2015, with direct participation of all MWCT health staff. Both campaigns were very successful with vaccination rates over 90% of targeted age-groups achieved.



Child polio vaccination at Iltilal Clinic.



Participants at the Kuku Health Workers Forum

EDUCATION

STAFFING

The Trust continued to support 21 schools within Kuku Group Ranch through the employment of 52 certified teachers, 2 cultural teachers and 11 support staff. This employment of education staff especially teachers continues to be a vital intervention by the Trust for benefit of the Kuku group ranch community whose schools face acute shortage of teachers. For instance some schools within Kuku group ranch still have a ratio of over 50 pupils to 1 teacher which is difficult to manage. This situation would have been worse without the support of the Trust.

ENROLLMENT

The enrolment of pupils in the schools supported by the Trust has been steady and by the end of 2015 it stood at 7,918 pupils with 48% being girls and 52% being boys. Most of the pupils enrolled are in the early childhood development classes (lower primary school) and there is a great challenge in getting sufficient classrooms for them in nearly all the schools.

SCHOOL SUPPLIES

The Trust continues to deliver assorted supplies to various schools within Kuku group ranch. The biggest beneficiary has been Iltilal Kanzi Primary school where the Trust provides all needed exercise books, text books, pencils, pens and erasers to each of the 968 pupils enrolled in the school. This school further benefited from assorted school supplies brought along by a Canadian who volunteered in the school library in September 2015. Another major beneficiary was Kanzi Academy where the Trust provides all needed school supplies every year. The Trust continues to look for additional supplies for distribution to the rest of the schools within the ranch that badly need them.



Iltilal Kanzi Primary School Pupils and teachers receive books donated by MWCT.



Kuku Mixed Secondary School head teacher and students receive curriculum books donated by MWCT.

SCHOLARSHIPS

The Trust in collaboration with community leaders expanded its scholarship program to include bursaries towards university education for Kuku group ranch students. To this end, the Trust gave bursaries to 42 university students in 2015 a move that was greatly appreciated by the community. In addition, the Trust continued to support 22 scholarships at secondary and primary school levels. We intend to offer university bursaries on yearly basis alongside supporting existing scholarships and offering new ones whenever available.

EXAMINATIONS

A common examination was administered in 11 schools within Kuku group ranch in order to prepare their candidates for the 2015 national examination. This examination was fully sponsored by the Trust and it provided a good performance indicator for the national examination. A total of 404 pupils from 11 schools within Kuku group ranch sat for the Kenya Certificate of Primary Education (KCPE) examination in 2015 and the results were released in December 2015.

There was a nationwide drop in performance of most public schools but one of our schools, Iltilal Kanzi, went against the grain to record its best ever performance since its inception and set a new record for Kuku group ranch schools. The school scored an average mark of 312.24 marks which is 35% improvement from its 2014 performance. Another Kuku group ranch school, Olkaria, scored an average mark of 256.85 representing 17% improvement compared to its 2014 performance.

Enkusero primary school participated in the national examination for the first time and managed to score an average of 203.33 marks. However, 3 of our schools namely Elangata, Oyarata and Enkii conformed to the national trend by recording a significant drop in their performance. The top pupil was a boy from Olkaria who scored 379 marks out of a possible 500 marks. This is a drop from the 2014 top pupil's mark of 392. The top 10 slots were dominated by boys with only 2 girls appearing in positions 9 and 10. This was similar to the case of 2014 where only 2 girls appeared in the top 10 slots though in better positions.

The results of the 2014 Kenya Certificate of Secondary Education (KCSE) examination were released in February 2015. We had 3 students under our scholarship program who sat for the national examination and managed to score B+, B- and C+ grades. The student who scored B+ was schooling at Lenana School in Nairobi, B- at Loitokitok Boys Secondary School and C+ at St. Clare Girls Secondary School. The grade of B+ qualifies to join public universities in Kenya under the regular program while the B- and C+ qualifies to join private universities, tertiary colleges or public universities under the self-sponsored program popularly known as the parallel program.

A summary of 2015 KCPE results are shown below.

SCHOOL	AV.MARK 2015	AV.MARK 2014	VARIANCE	% CHANGE
ILTILAL	312.24	230.87	81.37	35%
OLORIKA	298.93	276.83	22.1	8%
OLKARIA	256.85	219.75	37.1	17%
ELANGATA	238.95	255.74	-16.79	-7%
OLTIASIKA	230.52	219.64	10.88	5%
SHOKUT	223.46	226.02	-2.56	-1%
KUKU	211.46	209.04	2.42	1%
OYARATA	207.37	224.54	-17.17	-8%
ENKII	207.29	238.47	-31.18	-13%
ENKUSERO	203.33			
INKISANJANI	202.84	207.05	-4.21	-2%

Table 1: Summary of 2015 KCPE examination performance by schools

NAME	GENDER	SCHOOL	MARK
ANTHONY SANKORI LESENI	M	OLKARIA	379
STEPHEN LOISHORUA	M	OLORIKA	376
SOLOMON LOIPARUNI	M	ELANGATA ENKIMA	374
KIPAA MERUA	M	OLORIKA	368
JACKSON PANIAN PULUNG	M	ILTILAL	365
PAUL NGO THE WAITHERA	M	OLKARIA	360
EVANS SAIYANGA REREU	M	ILTILAL	357
TITUS ONINGOI NKOOMAI	M	ILTILAL	357
PAULINE MUSUNKUI KUNTAOS	F	ILTILAL	357
MONICAH WANJIRU	F	KUKU	356

Table 2: Summary of 2015 KCPE examination performance by top ten pupils

NEW ULTRA-MODERN LIBRARY

The library at Ittilal Kanzi primary school continues to benefit pupils and the community at large. It was frequented by students from various schools during the nationwide teachers strike in 2015. A Canadian volunteer helped in streamlining the books lending system.



New Library at Ittilal Kanzi Primary School

EDUCATION DAY

We organized a successful education day at Olorika Enkima Primary School which was attended by various education stakeholders including government education officers, group ranch officials, local area politicians, government chiefs, teachers, parents and pupils. We celebrated Olorika Primary school for emerging the top school in Kuku Group Ranch in the 2014 KCPE examination. The trust presented its rotational education trophy alongside other prizes to winners in various categories.



Olorika Primary School pupils and education stakeholders gathered for 2015 education day ceremony.

EXTRA-CURRICULAR ACTIVITIES

The trust supported Iltlal Kanzi Primary School to participate in ball games, athletics and music festivals at various levels. Maasai elders employed by the trust offered cultural lessons at Iltlal Kanzi and Enkii Primary Schools.



Kuku Group Ranch pupils and teachers on excursion at Tsavo West National Park.

MINISTRY OF EDUCATION

The Trust continues to enjoy a good relationship with the Ministry of Education through the Loitokitok Education Officers led by the District Education Officer.

CHALLENGES & SOLUTIONS

The Trust continues to lose P1 teachers to the government service which pays higher salaries. We lost 5 teachers in 2015 but we have since replaced them. It is desirable that the Trust continues to look for funds to harmonise teachers' salaries with those paid by the government. In addition, it is desirable to employ more teachers and construct more classrooms when specific funds become available in order to improve the quality of education in Kuku group ranch.

PARTNERS & DONORS

