



BIG LIFE FOUNDATION

QUARTERLY REPORT:
JANUARY - MARCH 2017

**“On the ground in Africa, partnering with communities to
protect nature for the benefit of all.”**

CONTENTS

LIST OF ABBREVIATIONS	3
DIRECTOR'S NOTE	4
WILDLIFE SECURITY	5
PROSECUTIONS	14
RHINO PROGRAM	17
HUMAN-WILDLIFE CONFLICT	18
HABITAT PROTECTION	23
PREDATOR PROTECTION PROGRAM	25
EDUCATION	29



LIST OF ABBREVIATIONS

ALOCA	Amboseli Landowners Conservancy Association
ANP	Amboseli National Park
AOO	Area of Operation
CHNP	Chyulu Hills National Park
CHRP	Chyulu Hills REDD+ Project
DSWT	David Sheldrick Wildlife Trust
HEC	Human-Elephant Conflict
HWC	Human-Wildlife Conflict
IPZ	Intensive Protection Zone
KWS	Kenya Wildlife Service
LG	Lion Guardians
MEI	Moran Education Initiative
MO	Maasai Olympics
MWCT	Maasai Wilderness Conservation Trust
PCF	Predator Compensation Fund
RDU	Rapid Deployment Unit



DIRECTOR'S NOTE

Water. Most of the western world turns on a tap and takes the resulting stream for granted. Here in Amboseli, rainfall dictates everything, and the consequences of poor rainfall weave their way through everything in turn. For example, we experienced a peak in bushmeat poaching in March of this year, thought to be a result of farm labourers turned to poaching to bring home some income during a time of massive crop failure. The crop failure has been fairly widespread, and it is particularly hard to watch communities that are struggling with these issues, and then having to manage hungry crop-raiding wildlife on top of it.

Thankfully, the first 45 km of fencing that we have been working on to help address human-elephant conflict is almost complete, and will be done within the next couple of months. The design, a short and solid electrified fence, already appears to packing an effective punch as we are seeing a reduced number of elephant incursions into the croplands behind the fence. It's a promising start, but we still have a long way to go before we have brokered a peace between farmers and elephants across the ecosystem.

On the elephant front, it's another quarter gone by without a single confirmed case of elephant poaching, and a recent study suggests that the market price of ivory is waning in the east. This is hugely encouraging, but for now the trade is alive and well. Big Life's increasingly active intelligence unit is doing what they can to put a stop to it in this region, and over this quarter their work led to the arrest of 11 ivory dealers, some of which were far outside our core area of operation.

Unfortunately, these and many other wildlife criminals are still slipping through the legal system, sometimes because of technicalities and other times because of failure to collect evidence in the correct manner. We are going to be addressing this immediately with targeted trainings, and this is another positive outcome of our process of monitoring the prosecution process.

As always, all of this and much more is detailed in the following quarterly report. There is so much happening in Amboseli at the moment, highlighting ongoing challenges but identifying big steps forward as well. Thank you as always for your support, without which, none of this would be possible.



A handwritten signature in black ink that reads "Richard Bonham".

*Richard Bonham,
Director of Operations, Big Life Kenya*

WILDLIFE SECURITY

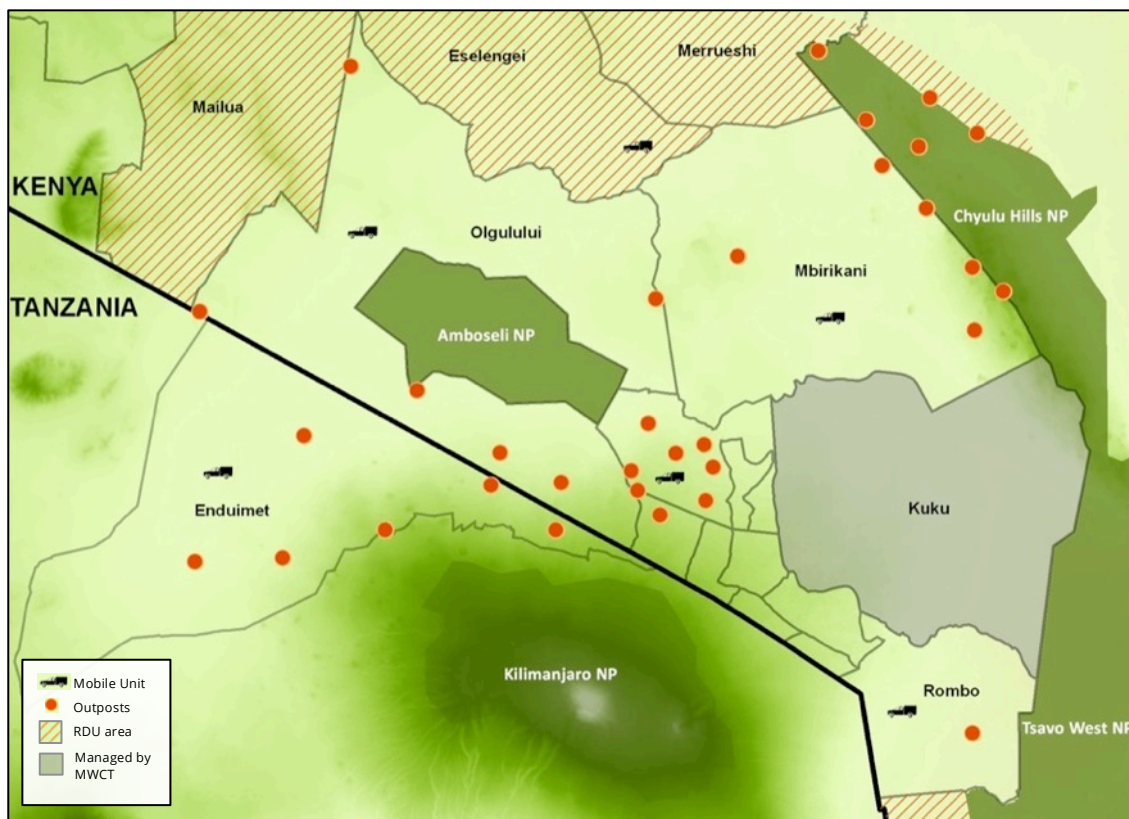
During the first quarter of 2017, Big Life rangers patrolled **22,955 km** by foot and **42,465 km** by vehicle.

Big Life rangers **arrested 73 suspects in 30 incidents** of illegal activity (details next page). Of these, **26 suspects were arrested in 10 poaching-related incidents**, including **11 suspected trophy dealers**. **Rangers recovered 102 kg of ivory from arrests**, and an additional 14.2 kg was collected from the field or handed in by community members. Half the poaching-related incidents (trophy dealing & bushmeat) took place outside Big Life’s core area of operation (AOO).

Big Life’s Core AOO, where we have a permanent security presence, includes: Mbirikani, Olgulului, Kimana, and Rombo Group Ranches, Amboseli National Park (ANP), & Chyulu Hills National Park (CHNP).

Non-Core areas covered by our mobile units include: Mailua, Eselengei, and Merrueshi Group Ranches, and the Taveta area.

Big Life units also provide support on request to KWS in Tsavo West National Park and to Maasai Wilderness Conservation Trust (MWCT) on Kuku Group Ranch.



BIG LIFE RANGERS

There are a total of 38 units in Kenya, currently comprising more than 220 trained rangers, and nearly 300 field staff in the wildlife protection network managed and/or funded by Big Life. The community rangers that Big Life was previously funding across the border in Tanzania are now being fully funded and managed by our partners at Honeyguide Foundation, and are no longer reflected in our statistics.

On the Kenyan side of the ecosystem, there are 28 permanent ranger outposts (one new outpost in Rombo Group Ranch was completed in the first quarter), with 4 mobile units, a Rapid Deployment Unit (RDU), 2 field teams that operate from their homes or tented camps, and 3 permanent observation posts covering a total of 1,678,000 acres. However, there are still important areas with insufficient attention, and we are actively fundraising for additional outposts and support of all existing outposts. If you are interested, please email donations@biglife.org for additional information.

INCIDENTS & ARRESTS

Crime Category	Crime Type	Incidents				Suspects Arrested			
		Jan	Feb	Mar	Total	Jan	Feb	Mar	Total
Community Crimes	Illicit brews	-	1	-	1	-	4	-	4
	Intention to rob	-	1	-	1	-	6	-	6
	Theft	1	2	1	4	3	3	1	7
Encroachment	Illegal grazing	1	2	2	5	1	5	2	8
Habitat Destruction	Charcoal production	1	-	2	3	1	-	4	5
	Illegal water pumping	1	-	2	3	6	-	7	13
	Logging	-	-	1	1	-	-	1	1
	Pollution	-	-	1	1	-	-	2	2
Poaching	Bushmeat	-	-	4	4	-	-	13	13
	Intention to snare	-	1	-	1	-	1	-	1
	Intention to poison	-	-	1	1	-	-	1	1
	Elephant spearing	-	1	-	1	-	1	-	1
	Trading in wildlife trophies	3	-	1	4	8	-	3	11
Total		7	8	15	30	19	20	34	73

CONFISCATED ITEMS

Item	Total
Charcoal bags	5
Charcoal kiln	1
Hoes	2
Ivory (kg)	116.2 kg
Kadoo lights	2
Knives	2
Machetes	8
Motorbike	1

Item	Total
Non-poisoned arrows	4
Python skins	2
Snares (general)	40
Snares (Rhino)	1
Spear	1
Torches	5
Vehicles <5t	2
Water pumps	16

WILDLIFE TROPHY INCIDENTS

No confirmed elephant poaching incidents occurred within Big Life's area of operation (AOO) during the first quarter. However, **11 people were arrested** in connection with **trophy dealing**. All of the incidents below were joint operations between the Big Life intelligence unit and Kenya Wildlife Service (KWS), and all apart from one took place outside Big Life's AOO.

Details:

- **January 4:** A Big Life informer helped KWS officers arrest three suspects with 40 kg of ivory in Namanga Town (*pictured below-left*).



- **January 7:** A Big Life informer led KWS officers to arrest two suspects with 20 kg of ivory in Emali Town (*pictured above-right*).
- **January 17:** Assisted by a Big Life informer, KWS arrested three suspects with 42 kg of ivory at Kasala area (*pictured below-left*).



- **March 24:** A Big Life informer assisted KWS in arresting three suspects with 10 kg ivory and 2 python skins in Loitokitok Town (*pictured above-right*).

ELEPHANT MORTALITIES

Total dead: 3

Total dead *within* Big Life's Core AOO: 2

Total dead *outside* Big Life's Core AOO: 1

During the first quarter, **three elephant mortalities** were recorded; all were either directly or indirectly **due to human-wildlife conflict (HWC)**. Tusks were recovered in all cases.

Details within and outside Big Life's AOO:

- **January 5:** An adult male elephant killed a herder, and injured another, on January 4th at Purkeet area, Mailua Group Ranch. The community retaliated by spearing the animal but it escaped. The community threatened to spear other elephants unless the animal responsible was euthanized. The bull was tracked to Olgulului Group Ranch and killed by KWS the following day at Iturot Wuasin area.
- **January 25:** An adult male elephant entered Bosnia area, Makueni County, an area outside the electric exclusion fence on the eastern boundary of Chyulu Hills National Park. As the rangers attempted to push him back, it charged at the crowd of onlookers from the community. To avoid a human injury or death, KWS rangers decided to euthanize the bull.
- **March 25:** On March 21st, a Big Life informer reported an elephant that was unable to walk in Nasipa area, Mbirikani Group Ranch. The rangers rushed to the area and confirmed that the sub-adult male elephant had a serious injury on the left front leg. The KWS vet was called immediately and treated the 10-day-old spear wound. Rangers continued to monitor the bull, but he died later that day. Both tusks were recovered and taken by KWS. *(pictured below)*



ELEPHANT INJURIES

Treated in Big Life's AOO: 3 (with KWS & the David Sheldrick Wildlife Trust [DSWT] mobile veterinarian)

Not treated: 10

Details of elephants treated:

- **February 1:** Big Life's Osewan team on patrol at Kituait area, Olgulului Group Ranch came across tracks of an elephant bleeding. They tracked and found an adult male with an estimated 3-day-old spear wound on the left front leg. The KWS vet arrived but could not dart the animal because he moved into thick bush. The treatment was postponed to the following day, and was done successfully.
- **February 5:** While on patrol at Olporokwai area, Mbirikani Group ranch, Big Life's New Site team came across an adult male elephant that had a spear injury at the base of his tail. The KWS vet was alerted and treated an approximately 1-week-old spear wound that was 15 cm deep.
- **March 21:** An informer reported a sub-adult male with a spear wound on the left front leg at Nasipa area, Mbirikani Group Ranch. Big Life's rangers rushed and confirmed that the animal could not move and his health was deteriorating. The KWS vet successfully treated the spear wound, however, he later died on March 25th (*pictured below during and post-treatment*).



Not treated:

- **January 4:** While pushing back elephants that had strayed outside Chyulu Hills National Park, Big Life's Didima unit saw an elephant that looked to have an infected wound. Before they could get closer, the animal disappeared.
- **January 5:** While on patrol at Ol Donyo Wuas area, Mbirikani Group Ranch, rangers saw an adult elephant named *Jagged Ear* that had been wounded in a retaliation incident in December and looked as though follow-up treatment might be required. The KWS vet was notified, but asked the rangers to monitor the bull since he was not able to get to the area. The vet arrived on January 5 but confirmed that the wound was healing and additional treatment was unnecessary.

- **January 7:** An informer reported an elephant that was speared on the leg at Emotoroki borehole, Olgulului Group Ranch. Big Life's Osewan team were unsuccessful in locating the animal whose tracks headed to Amboseli National Park.
- **February 4:** Farmers in Oltepesi area, Kimana Group Ranch informed our rangers of an elephant bleeding. A combined search with four Big Life teams and KWS learned that the injured animal was the famous tusker named Tim. He had a spear wound on his trunk. The vet was informed but was unable to accurately diagnose the severity of the wound since it was late in the evening. On February 5, the vet arrived and confirmed that the wound was healing and treatment was unnecessary.
- **February 12:** Big Life's Head of Security received information of an elephant with a back injury at Ol Donyo Wuas area, Mbirikani Group ranch. The KWS vet was informed but was not available to attend to the animal.
- **February 19:** An elephant fell on the road along Mombasa-Nairobi highway at Kibwezi area, Kitui County and broke one of its tusks at the base. The animal was suspected to have suffered serious injury but was never found. The broken ivory pieces were collected and taken by KWS.
- **February 24:** The New Site team at Ol Donyo Wuas area, Mbirikani Group Ranch, found an adult male elephant that had previously been treated for scrotum cancer. Big Life's Director of Operations and the Head of Security examined the elephant and advised that further treatment was unnecessary.
- **March 1:** A Lion Guardian informed our rangers of an elephant that was dragging its hind right leg in Naitila area, Eselengei Group Ranch. The following day, a combined search by Big Life and Porini rangers tracked the animal into Porini Conservancy, but lost them when cattle obscured the tracks. On March 3, they resumed the search operation and found the adult male drinking at Enkii borehole. The lower part of the right hind leg was swollen, but the elephant had no obvious physical injury. The rangers found the same animal on March 27 and called in KWS vet who arrived but could not complete the darting due to the wet/slippery conditions, because the bull would not be able to stand following treatment. Rangers continued to monitor the elephant and it was eventually decided that the wound was healing and that treatment was unnecessary.
- **March 22:** Rangers received information from community members at Emotoroki area, Eselengei Group Ranch of an elephant bleeding. Big Life's RDU rushed to the area and tracked the animal into Porini Conservancy where they lost the tracks.

ELEPHANT RESCUE

Rescued: 2

- **January 8:** While looking for an injured elephant at Lengolong area, Olgulului Group Ranch, Big Life's Esiteti unit came across a baby elephant stuck inside a waterhole for two days. They managed to pull her out and DSWT airlifted her to their Nairobi orphanage. *(pictured below)*



- **March 23:** An approximately 1-year-old male elephant was reported wandering alone in the bush of Rombo Group Ranch. Our Rombo rangers confirmed the incident and kept monitoring him until the following day when he was captured and released to DSWT who airlifted him to their Nairobi orphanage (*pictured right*).



OTHER WILDLIFE RESCUES

- **March 3:** A few-days-old zebra foal found alone near HQ by the Clinic team. It was taken by Tsavo Trust to their orphanage. (*pictured right*)
- **March 3:** A few-weeks-old zebra foal was found near Tortilis Camp; rangers brought it to HQ until Tsavo Trust could collect it.
- **March 4:** The son of a ranger saw dogs chasing a few-days-old kudu. He scared the dogs and rescued the baby and called his dad to collect it. It also went to the Tsavo Trust orphanage (*pictured right*).



BUSHMEAT POACHING

Poaching for bushmeat continues throughout the ecosystem, especially in areas with high densities of both people and wildlife and along the extreme edges of Big Life's AOO. Over the reporting period, **13 suspects were arrested in 4 incidents** for bushmeat poaching. The table below details animals killed by poachers during the first quarter. Higher poaching incidents in March are attributed to dryer conditions, before the rains arrive in April, as casual farming laborers are temporarily unemployed and poaching for income. Wildlife are concentrated during the dry season, and therefore easier to find near artificial water points, and therefore near people.

	Dik-dik	Eland	Giraffe	Zebra	Total
January	1	-	-	-	1
February	-	1	3	-	4
March	2	6	2	1	11
Total	3	7	5	1	16

Details:

- **January 19:** One Tanzanian suspect was arrested with over 100 kg zebra meat and two kadoo lights in Rombo Group Ranch (*pictured right*).
- **February 23:** One suspect was arrested with 30 snares capable of killing small and medium sized animals in Rombo Group Ranch.
- **March 8:** Through an informer, rangers arrested seven people with eland meat at Budalangi area, Kimana Group Ranch.
- **March 13:** Big Life's RDU and Porini rangers acting on an informer tip arrested one suspect who had killed a giraffe at Irmukutani area, Eselengei Group Ranch.
- **March 28:** Acting on information, Big Life's Mobile 2 Unit arrested four suspects with 105 kg eland meat at Oloile area, Kimana Group Ranch.



DE-SNARING

Forty-one snares were recovered during arrests and de-snaring patrols in the first quarter. One was a cable snare targeting rhino and the rest were lighter gauge wire targeting small to medium mammals. Two were discovered after killing wildlife. **Thirty-nine snares were recovered before they could kill.**

HABITAT DESTRUCTION

During the first quarter, **21 arrests** were made in **8 incidents**. The majority of arrests were for **13** Illegal water-pumping suspects (arrested in 3 incidents), and 5 charcoal producers. Other incidents included illegal logging and pollution (for improper disposal of waste).

COMMUNITY CRIMES

Big Life rangers continue to assist the community in apprehending various non-wildlife-related criminals. During the fourth quarter, rangers **arrested 23 suspects in 6 incidents**:

- **January 24:** Rangers arrested three suspects who had stolen some items from a lodge.
- **February 9:** Rangers arrested four suspects who were selling homemade alcohol in Rombo Group Ranch.
- **February 11:** One suspect was arrested in Olgulului Group Ranch for stealing cows from Mbirikani Group Ranch.
- **February 17:** One suspected was arrested for stealing two goats in Rombo Group Ranch.
- **February 21:** Big Life and KWS Rhino Units arrested six suspects near the Chyulu Hills National Park boundary. Upon interrogation, it was discovered that they intended to rob unidentified persons in the area.
- **March 9:** Community members reported approximately 60 donkeys stolen by unknown people. Investigation by our rangers led to the arrest of one suspect, who admitted to stealing 19 donkeys and killing them to sell their skins. He was arrested in Namanga town.

PROSECUTIONS

During the first quarter, **seven wildlife-crime cases were concluded:**

Date of Arrest	No. Suspects	Crime	Bond (USD)	Remarks
9/1/14	3	Bushmeat poaching - 1 eland	3,000	The evidence presented was not enough to go trial. They have been in custody since 2014.
5/17/15	1	Bushmeat poaching - 3 Grant's gazelles, 1 impala & 2 dik-diks	500	The magistrate cited that the evidence presented was not enough to prosecute the suspect.
12/4/15	1	Ivory trade	500	There was not enough evidence to prosecute the suspect.
1/5/16	2	Bushmeat poaching - 1 zebra	2,000	There was not enough evidence to prosecute the suspect.
9/30/16	1	Bushmeat poaching	2,000	Suspect had pleaded guilty. Sentenced to 2 years in prison.
10/5/16	2	Poaching intention	2,000	Case withdrawn for lack of enough evidence.
3/8/17	6	Bushmeat poaching - eland	2,000	Suspects plead guilty. Three were given a fine of \$2,000 or 2 years in prison. Suspects appealing ruling. Three Tanzanians repatriated to their country.

The table below details cases that are ongoing:

Date of Arrest	No. Suspects	Crime	Bond (USD)	Remarks
7/6/13	1	Ivory trade	300	Out on bond
7/26/14	2	Trophy poaching	1,000	Out on bond
12/25/14	1	Bushmeat poaching - 3 gazelles & 4 dik-diks	1,000	Out on bond
1/11/15	3	Bushmeat poaching - 1 dik dik	500	Out on bond
3/16/15	8	Bush meat poaching - 1 eland	1,000	File finally located. The case continued where it was left. The suspects were summoned to court under an earlier given bond.
4/24/15	2	Elephant spearing	1,000	At the judge's request, the police file brought in to continue with the case. Suspects out on bond.
6/11/15	2	Lion poisoning	500	Out on bond
6/27/15	1	Bush meat poaching - 1 impala	2,000	Suspect still in custody. Could not raise the required bond.
6/27/15	1	Bushmeat poaching - 3 dik-diks	2,000	Out on bond

Date of Arrest	No. Suspects	Crime	Bond (USD)	Remarks
7/9/15	1	Ivory trade	1,000	He asked for a bond review. Out on bond.
8/19/15	1	Bushmeat poaching - 1 impala	2,000	Suspect still in custody
9/29/15	2	Ivory trade	20,000	Out on bond
10/2/15	1	Ivory trade	5,000	Still in custody. Could not raise the bond.
10/2/15	1	Ivory poaching	5,000	Still in custody
11/7/15	3	Bushmeat poaching - 1 eland	2,000	Suspects still in custody.
11/8/15	2	Bushmeat poaching - 1 dik-dik	2,000	Suspect still in custody. Lab report presented, awaiting ruling.
12/13/15	2	Bushmeat - 2 gazelles	2,000	Still in custody
1/24/16	1	Ivory trade	5,000	Paid 2,500 and released on bond.
1/26/16	1	Ivory trade	5,000	All witness testified, awaiting judgment.
2/1/16	1	Ivory trade	10,000	Out on bond, awaiting ruling.
3/24/16	2	Ivory trade	50,000	Suspect out on bond
3/29/16	1	Ivory trade	200,000	Bond reviewed down to 10,000. Still in custody.
1/5/16	3	Ivory trade	3,000	One suspect released on free bond. Other suspects bond reviewed down, released.
2/8/16	1	Trophy poaching	Bond not given	Suspect still in custody
4/14/16	1	Ivory trade	Bond not given	A letter has been written by the prosecution to release the suspect. Case awaiting judgement.
5/15/16	2	Bushmeat poaching	2000	Case coming for mention on 4 th April before going for judgment on the 20 th April.
6/2/16	1	Ivory trade	10,000	Could not raise the bond. Suspect still in custody. The last witness testified.
6/14/16	1	Ivory trade	10,000	Suspects are out on bond.
7/31/16	2	Forest fire	Bond not given	Suspect released on free bond.
8/4/16	1	Bushmeat poaching - 1 giraffe	1,000	Suspect out on bond. Lab report tabled in court.
8/7/16	2	Bushmeat poaching - 1 Grant's gazelle	2,000	Suspects still in custody, couldn't raise the bond. Case at the judgment stage.
8/12/16	2	Ivory trade	2,000	One suspect taken to court martial (because he is a government official). The other suspect is in a civilian court.
8/16/16	2	Ivory trade	Bond not given	Still in custody.
9/2/16	3	Bushmeat poaching	2,000	Suspect ran away while prosecution was calling for witness. Warrant of arrest has been issued.
9/25/16	1	Ivory trade	20,000	One witness to testify. Suspect out on bond.

Date of Arrest	No. Suspects	Crime	Bond (USD)	Remarks
10/2/16	2	Ivory trade	5,000	Out on bond. Awaiting investigation officer witness.
10/11/16	1	Sandalwood trade	1,000	Released on bond.
10/14/16	2	Bushmeat poaching - zebra	2,000	They refused to cooperate with the court each time the case was to continue. They have been warned to cooperate next time.
11/8/16	5	Trespassing in National Park (rhino area)	2,000	Suspect out on bond.
11/15/16	4	Sandalwood trade	1,000	Suspect out on bond.
11/19/16	1	Ivory trade	20,000	Pleaded not guilty, still in custody.
12/7/16	1	Ivory trade	5,000	Pleaded not guilty, still in custody.
12/24/16	2	Ivory trade	50,000	Suspect still in custody.
1/4/17	3	Ivory trade	10,000	Out on bond after it was reviewed down from \$15,000
1/16/17	3	Ivory trade	15,000	Suspects could not raise the bond.
1/19/17	1	Bushmeat poaching - zebra	2,000	Suspect still in custody
2/9/17	1	Ivory trade	100,000	Bond review down to \$5,000, he raised bond & released.
3/16/17	1	Poaching intention	2,000	Suspect charge sheet is being amended before first hearing.
3/18/17	1	Bushmeat poaching - 2 giraffe	2,000	Case awaiting first hearing
3/23/17	3	Ivory trade	10,000	Case awaiting first hearing

RHINO PROGRAM

Big Life has been working hard to obtain Intensive Protection Zone (IPZ) status in the Chyulu Hills, and our efforts are progressing well. The Chyulu Hills are ideally suited for rhinos, and achieving IPZ status would enable us to qualify for inbound rhino translocations into the habitat. It is vital that the remaining population of **seven Eastern black rhinos** continues to prosper in order for this to be achieved, and we are happy to report that all rhinos in our area are **currently healthy**. As other rhino habitats in Kenya reach carrying capacity, the future of the Chyulu Hills as free-roaming black rhino range becomes more and more important for the preservation of the species and the well-being of individual animals.

In order to qualify as an IPZ, the Chyulu Hills area needs to meet a number of minimum requirements designed to ensure that the rhino population (whether augmented by inbound translocations or not) receives sufficient protection and monitoring and will continue to do so. The next five-year National Rhino Strategy is currently being drawn up. During the process, Big Life and KWS will undertake a review of the IPZ requirements and assess progress and next steps. The Rhino Strategy will incorporate said review either granting IPZ status or increasing the requirements, and will serve to lay out the next steps and a date for translocations within the five-year period.

The IPZ requirements already met, *at a minimum*, but still being improved include:

1. Fencing of the eastern boundary of CHNP, which is bordered by a large community. Fencing of the rhino specific area is complete, however, in anticipation of continued HWC, and inbound translocation of rhino, the fence will extend until the entire northeastern boundary is fenced;
2. Upgrading of the internal road network (used by rangers)—now meets minimum IPZ criteria, but Big Life will continue to improve roads as needed and when the budget allows;
3. installation of an additional water points for rhinos and other wildlife—the water currently available meets the minimum required for existing rhinos; however, for multiple translocations into the area, an additional waterhole and an upgrade of water infrastructure will be necessary;
4. Increased availability of security-specific manpower, resulting in increased effectiveness of both security and monitoring.

Big Life continues to fundraise for the above needs, and together with key partners, we hope to achieve IPZ status by the end of 2017. Thanks to the DSWT and KWS, fencing of the specific rhino area is complete and plans for increasing the fence to secure contiguous areas are ongoing. However, we still need significant additional funding in order to complete the necessary improvements described above. Please email donations@biglife.org if you are interested in helping us to achieve IPZ status in this critically-important rhino habitat.

RHINO MONITORING

During the quarter, monitoring teams had 13 direct rhino sightings, 240 indirect sightings (via camera trap), and 87 sightings of spoor. (*Dixon pictured below*)



HUMAN-WILDLIFE CONFLICT

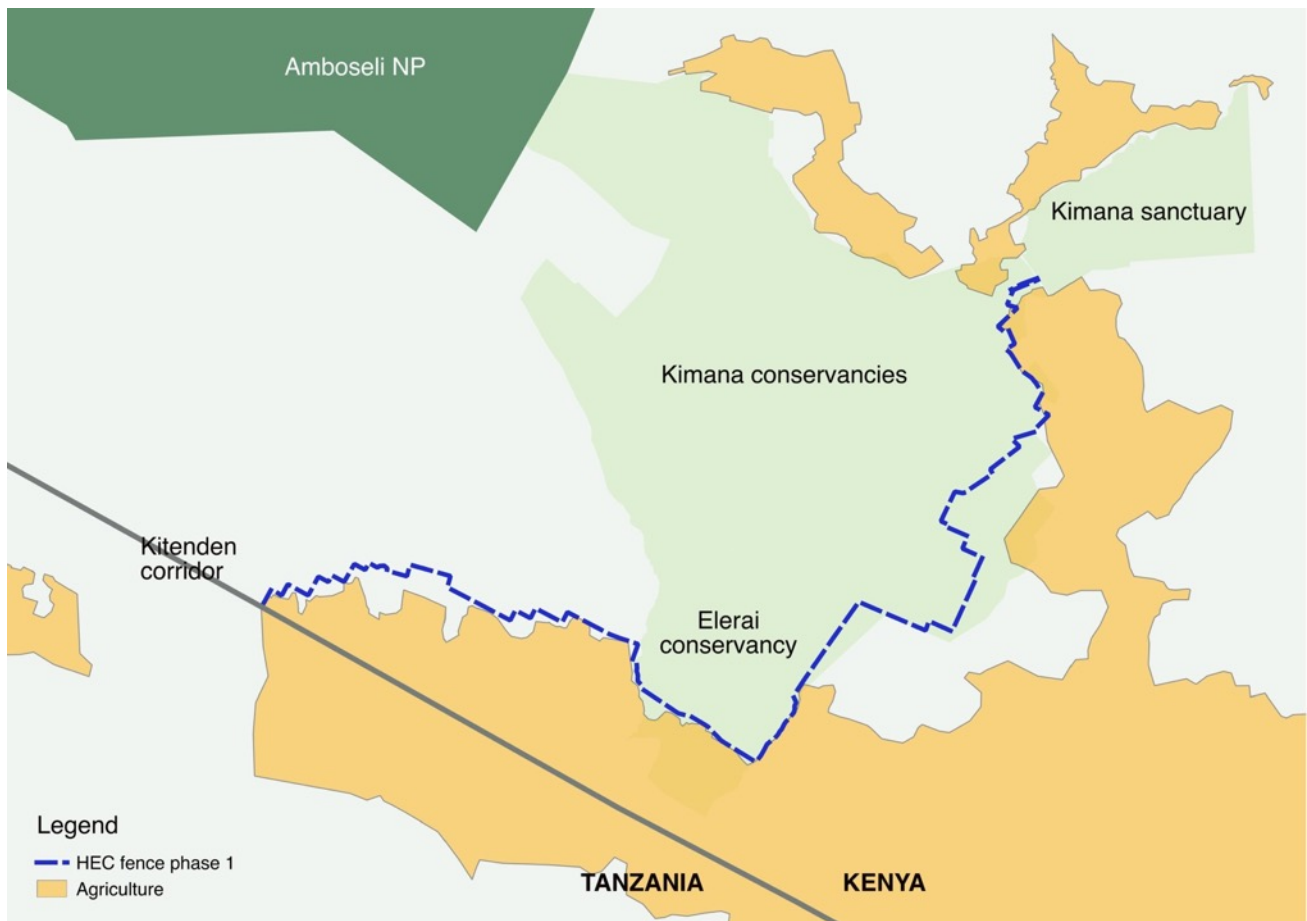
Human-wildlife conflict (HWC), specifically **human-elephant conflict** (HEC), continues to be the **most significant threat** to the ongoing conservation of wildlife within the Amboseli-Tsavo-Kilimanjaro ecosystem. Incidents in which humans are injured or killed appear to be happening more frequently, which has led to increased retaliation against and mortality of elephants.

During the first quarter, the rangers managed to stop two elephant retaliation hunts.

ELEPHANT EXCLUSION FENCE

To address, and reduce, HWC within the ecosystem, Big Life is working with communities to build and manage an electric fence that will separate farms and people from wildlife, namely elephants.

Phase 1 of fence construction, from the Kitenden corridor to the wildlife corridor north of Kimana town, is nearly complete. Two construction teams are on the ground, **38 km are fully complete and the remaining 7 km are in various stages of completion**. Farmers are already seeing a difference in the reduction of elephants raiding crops.



Map showing alignment of HEC mitigation fence currently under construction

Each construction team is training three local community members on fence construction and maintenance, and these trainees will form the backbone of the maintenance team once the contractor hands over the completed project. Funds for maintenance of the fence will be contributed by the community, currently proposed at approximately \$10 per farmer per year. The community fence management committee has held a series of sensitization meetings with the community on the need to raise funds for maintenance, with positive response.

The fence will secure the farming areas around to the south and east of the Kimana conservancies (Amboseli to the west is the main source of elephants moving into these areas). It will reduce farmer losses in addition to creating a hard boundary between agricultural land, and habitat for wildlife and livestock. Big Life is leasing this unconverted land through the Kimana lease program (*detailed below under Habitat Protection*). However, not all of the land in the conservancies has been leased and so there is more work to be done in future to generate more community benefits from these conservancies and encourage more landowners to sign up.

Once complete, the fences will then funnel wildlife through a protected gap (<100m) between the Kimana conservancies and the Kimana sanctuary, from where animals can move onto Kuku Group Ranch and beyond to Tsavo West National Park safely.

HUMAN-ELEPHANT CONFLICT & CROP-RAIDING

This quarter has been very dry, and there has been large scale crop failure in the rain-fed agricultural areas of the ecosystem. As always, wild animals, particularly elephants, were drawn to the water and fodder available in farms, but these crop-raids were largely concentrated in irrigated croplands. The HEC mitigation fence is already having an important impact in protecting the farms on the lower slopes of Kilimanjaro from elephant crop-raiding. Out of the **196 recorded crop-raiding incidents** in which damage occurred, **elephants were responsible for 170 incidents**, and damaged **151 of the total 182 acres** of crops. (see map next page)

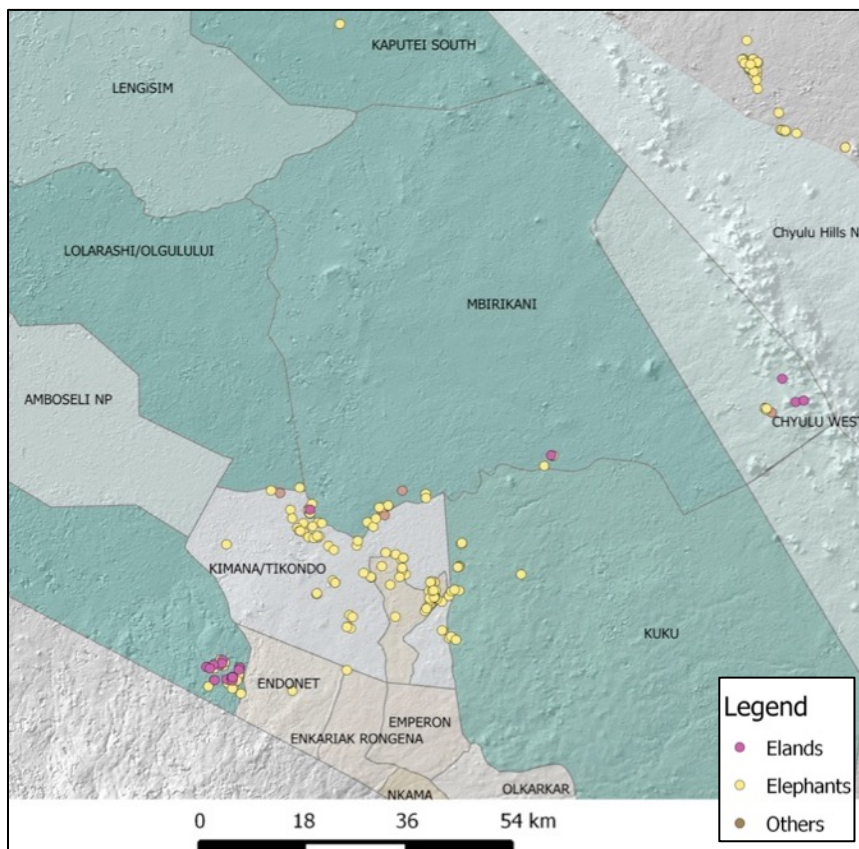


Rangers chasing elephants out of community farms

Big Life also mobilized community members to assist in the coordination and increased preemptive deployment of crop-protection rangers to select areas near routes that are commonly used by elephants. As a result, our rangers **prevented 300 incidents** (up from 99 last quarter) before the animals could cause any damage, and before anyone (human or elephant) was harmed.

Number of incidents and acres damaged per crop species:

Crop	Incidents	Area damaged (Acres)
Bananas	1	0.5
Beans	17	12.75
Cabbage	1	0.25
Maize	83	100.5
Mangoes	5	3.5
Millet	1	0.25
Miraa	2	0.5
Onions	6	16.75
Peas	4	3.25
Potatoes	7	5.5
Pumpkin	3	2
Tomatoes	64	36
Watermelon	1	0.25
Wheat	1	0.25
Total	196	182.25



Map: Areas impacted by wildlife crop-raiding in the Amboseli ecosystem from January-March 2017

HUMAN INJURIES & DEATH

During the first quarter, two incidents involving elephants led to the tragic death of two people, while 12 people suffered injuries from elephants (10) and other wildlife [leopard (1) and buffalo (1)]. The two deaths were outside our Core AOO. Five injuries were inside our Core AOO, and the remaining four were in our Non-core AOO.

Details:

- **January 4:** An elephant killed a herder in Purkeet area, Mailua Group Ranch. The community threatened to retaliate and kill elephants, but rangers managed to calm them. The responsible elephant was later eliminated by KWS to stop potential retaliation.
- **January 4:** A herder was injured by the same elephant that killed the boy (*above*).
- **January 8:** An elephant killed a woman from the community east of Chyulu Hills National Park, Makueni County. The community demonstrated and threatened to retaliate. Big Life's Chyulu Unit, together with KWS and area chiefs, managed to calm them down.
- **January 11:** While on patrol at Oyarata area, Kimana Group Ranch, an elephant charged at our rangers. While escaping, one ranger sustained minor injuries. He was taken to hospital where he was treated and discharged.
- **January 30:** A woman sustained minor injuries while escaping an elephant that was charging at her in Olgulului Group Ranch. She was taken to hospital where she was treated and discharged.
- **January 31:** A herder sustained injuries on the thighs and the neck when a buffalo attacked him in Rombo Group Ranch. Big Life took him to the hospital where he was treated and discharged.
- **February 4:** A woman was reported injured in Taita, Taveta County, by an elephant.
- **February 14:** A man sustained minor injuries from a thorn fence he jumped over while escaping an elephant that charged at him in Olgulului Group Ranch.
- **March 4:** A man sustained injuries on the arm and legs when he narrowly escaped an elephant charge at Makueni County.
- **March 4:** Four people were injured by a leopard following predation of three shoats in Mailua Group Ranch. The injuries were sustained while hunting the leopard in retaliation.
- **March 15:** While chasing a herd of elephants out of farms at night on Kimana Group Ranch, an elephant charged at our rangers and knocked one off a motorbike he was riding. He sustained minor injuries.

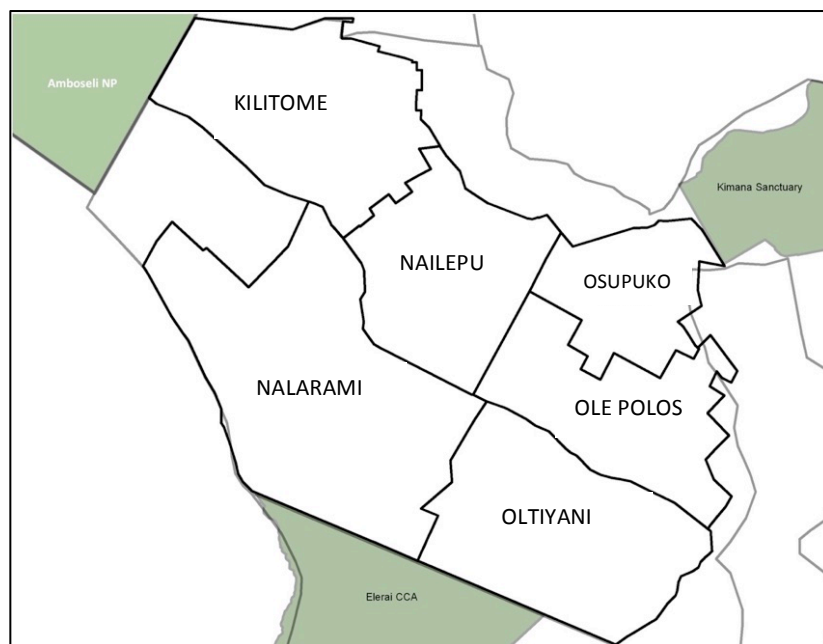
Big Life has created a Wildlife Conflict Scholarship fund to help support the families impacted by these unfortunate deaths. Please email donations@biglife.org if you would like to contribute.

HABITAT PROTECTION

LAND LEASES

In June 2016, Big Life took over the management of land leases on six conservancies on Kimana Ranch (*identified in the map below*), under the umbrella of the Amboseli Landowners Conservancy Association (ALOCA), that protect the important wildlife dispersal areas of Kimana as well as the critical corridor that links Amboseli NP to the Kimana sanctuary and beyond to Kuku and Tsavo West NP. Under the former management organization, a land lease program was set up on the conservancies to pay each conservancy member an annual fee per acre of land, in return for restrictions on damaging development (fencing, farming, unapproved building). The lease was renegotiated as part of the management transition to Big Life, with an increase in lease fees for a period of 15 years.

In the first quarter, attempts to convert unsigned landowners continued. Five new landowners were added to the Nailepu and Nalarami Conservancies, including a landowner in very narrow (<100m) but critical corridor connecting Amboseli to the Kimana Sanctuary. Additionally, following the first payment under the new agreement (and higher lease fees) in December, people are feeling more positive toward the conservancy concept, and we are hopeful that outstanding landowners will join in the coming months.



PERMACULTURE

The Maasai have not traditionally been a farming community, but some areas within the ecosystem that have been farmed for many decades. In the past, agricultural areas were either rain-fed or irrigated

from springs through networks of furrows, and this combined with poor market access confined the land-use to a limited area. Recent improvements in market access, and a growing demand from a burgeoning urban population in Nairobi, have incentivized the spread of agriculture. This has been facilitated by a proliferation of personal generators that allow people to pump water from springs and rivers, as well as the now well-established practice of tapping the Mbirikani water pipeline (fed by melt water from Kilimanjaro) for irrigation. The result has been excessive and unsustainable water use, and intensive use of pesticides and fertilizers, both of which are needed in increasing amounts as the soil degrades. Big Life is making an effort to address such issues through a permaculture project, in partnership with One Heart Farm as of early last year.



The project employs two men (*pictured above*), one of whom is formally trained in permaculture techniques, and they have started a demonstration farm at a local primary school with the aim of supplying the school kitchen with healthy food and getting children involved in the process. At the end of 2016, the project has shifted to a farm in the agricultural zone of Namelok, where efforts are underway to create a commercial permaculture model. Various markets will be targeted for produce, including local lodges and towns, shops and restaurants in Nairobi, and ideally some international buyers for specialist products. Once this commercial demonstration farm is up and running, the next step will be the facilitation of courses in permaculture design for local farmers. The aim of the project is to expand permaculture farming practises to all intensive agriculture zones within the ecosystem, to reduce water and chemical usage with resultant environmental benefits, and also to provide a means of engagement with local farmers, many of who deal with HWC on an ongoing basis. Ideally the project will also increase income to local farmers through improved marketing structures.

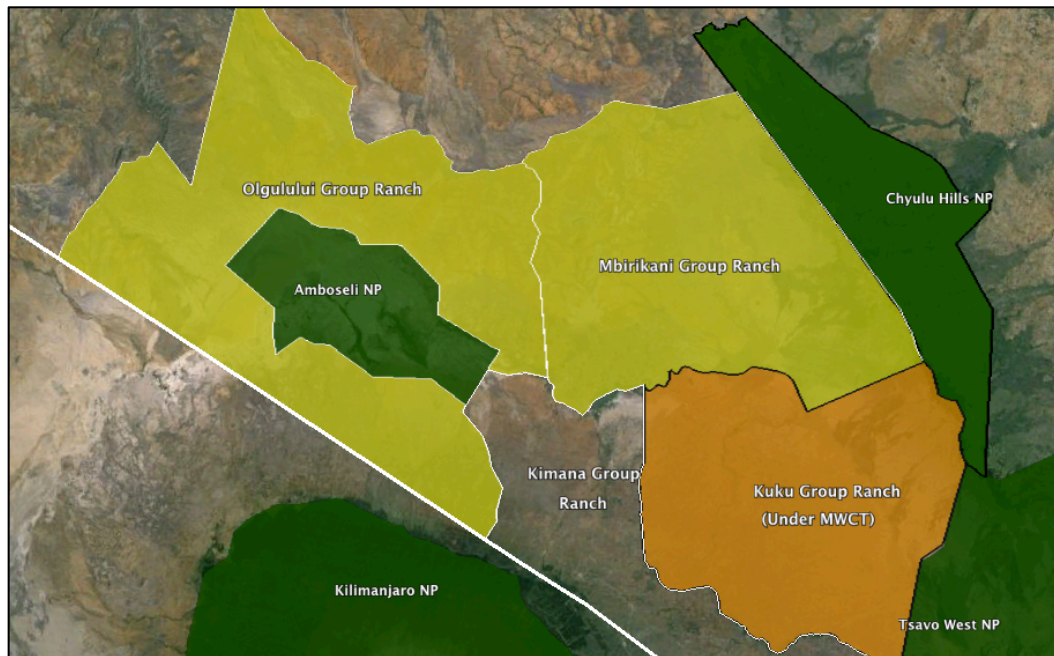
During the first quarter, one permaculture training was led by the Laikipia Permaculture Centre for communities in the Namelok and Isinet farming areas. Two additional project farms were created, one in

each farming center, one of which is being run by a local women's group. Over the coming months these newly established farmer groups will work with Paul and Eric (the project employees) to develop business plans, farm design, and work-plans for cultivation, harvesting, and marketing.

PREDATOR PROTECTION PROGRAM

Big Life protects the major predators of the Amboseli ecosystem through an innovative predator protection program on two participating group ranches, Mbirikani and Olgulului Group Ranches. The core component of this program is livestock compensation—the Predator Compensation Fund (PCF)—aimed at reducing the motivation for retaliatory killing of predators following livestock depredation.

The PCF pays livestock owners for a portion of the value of animals lost to predators, on the condition that no predators are killed in retaliation. Big Life staff verify all alleged depredations, and penalties are applied for factors such as poor animal husbandry. The community provides 30% of the total compensation, which is paid every two months, and fines are applied if any predators are killed in PCF areas (see map below). MWCT runs a similar program on neighboring Kuku Group Ranch, but contiguous expansion of Big Life's PCF is necessary to ensure broader protection. Big Life is in discussion with some of these neighboring communities about the possibilities of establishing PCF programs in 2017.



Map: Ranches covered by predator compensation in the Amboseli ecosystem

The second part of Big Life's predator protection strategy is focused on the morans (warriors) of the Maasai community, and is known as the Moran Education Initiative (MEI). In Maasai culture, lion killing has traditionally been an important part of becoming a man, but Big Life is working with local communities to achieve a cultural shift.

In 2012, Big Life worked collaboratively with the cultural fathers (Menye Layiok) to create the first-ever Maasai Olympics, a culturally-relevant sporting event for warriors across the ecosystem. The Maasai Olympics gives young men an alternative avenue through which to demonstrate their bravery and physical prowess, with competitive events for women as well. The lead-up to the main event is combined with a targeted education program aimed at changing attitudes and behavior to wildlife and conservation. The Olympics take place every two years, with conservation education meetings with the warriors and community members held intermittently throughout both years. The next Maasai Olympics will be held in **December 2018**.

PREDATOR COMPENSATION FUND

The table below details livestock killed by predators and compensation paid to livestock owners on Mbirikani and Olgulului Group Ranches during the first quarter of 2017:

	Cattle	Shoat	Donkey	Camel	Total	USD
CHEETAH	6	154	-	-	160	5,283
ELEPHANT	-	1	-	-	1	38
HYENA	103	534	18	-	655	19,485
JACKAL	-	116	-	-	116	2,246
LEOPARD	4	9	-	-	13	871
LION	68	39	6	1	114	14,627
TOTAL	181	853	24	1	1058	42,550



Livestock are herded into a traditional enclosure (boma) for protection from predators at night

PREDATOR INCIDENTS

It is important to note that while PCF is the fulcrum of Big Life's predator protection efforts, the security network also plays an important role. Big Life has learned that a quick response by rangers to conflict goes a long way towards calming livestock owners.

Working together, Big Life's rangers, informers, and PCF personnel, often in conjunction with partners at KWS and Lion Guardians (LG) stop lion hunting parties before they can kill. This quarter we **stopped two lion hunts**.

Additionally, in January, Big Life & KWS collared a lioness named Nelowua, and LG & KWS collared a potential repeat livestock killer. In February, after a few weeks of repeated lion depredation of livestock inside bomas, the community would tolerate no more. To avoid lions being killed, a different sub-adult male lion was translocated by KWS to a different ecosystem.

LION HUNTS STOPPED

Details:

- **January 7:** Two Lions broke into bomas in Lemasusu, Mbirikani Group Ranch, and killed three calves in the first boma, one sub-adult cow in the second boma, and one sub-adult bull in the third. Community members were in the bush tracking the lion when rangers stopped them.
- **February 14:** A lion hunt nearly started at Olngosua area, Mbirikani Group Ranch, after a lion killed a cow, but Big Life rangers and staff were able to calm them.

PREDATOR MORTALITIES

Eight predator mortalities were recorded during the first quarter. Four were caused by human retaliation, but **none were by communities participating in PCF**. The remaining deaths were human-related (2), and natural (2).

Details:

- **February 2:** A hyena was killed by a vehicle at Empoocho area, Mbirikani Group Ranch.
- **February 2:** An adult hyena killed 3 shoats (sheep or goats) and one young dog, and seriously injured 2 other shoats inside a boma at Lemong'o area Kimana Group Ranch. Community members speared the animal to death.
- **February 3:** A striped hyena was killed in a fight with another at Ol Donyo Wuas area, Mbirikani Group Ranch.
- **February 16:** A cheetah was found dead in a large waterhole (presumed drown) in Oltisika, Mbirikani Group Ranch.

- **February 23:** Lions killed a cow and the owner laced the carcass with poison. Two adult lions ate the poisoned carcass at Ewuas Enteripeny, Olgulului Group Ranch (see pictures below). The suspect has been identified as a member of Mailua Group Ranch, and the search for the suspect is ongoing.



- **March 4:** Oltepesi community, Mailua Group Ranch, killed a leopard that killed three shoats inside a boma,
- **March 6:** A lion named Oyayai was euthanized by KWS after he suffered serious injuries during a fight with another lion in Nairabala area, Olgulului Group Ranch.

MORAN EDUCATION INITIATIVE

While 2017 is an 'off' year for the Maasai Olympics, engagement of the warriors, the Menye Layiok (or '*cultural fathers*') and the general Maasai community on important conservation issues continues. This ensures that the conservation education provided during the Maasai Olympics is continually reinforced, and that the passion and zeal generated during and immediately following the sports competitions (which took place in December 2016) do not die out.

During the first quarter, four meetings were held regarding HWC, specifically identifying conflict issues and possible solutions for HWC response. The first of these meetings was held with warrior chiefs, Menye Layiok, Kenya Police, KWS, group ranch leaders, among others, to agree on steps to be taken following a serious HWC incident, such as an elephant injuring or killing a human, or lions killing livestock, resulting in a lion hunt.



The other three meetings were with each of the warrior manyattas (villages) to disseminate the information discussed with the leaders, regarding appropriate responses to HWC, the rules of the Wildlife Act 2013 (where killing wildlife is illegal) and the associated penalties (*pictured above*).

Steps moving forward are:

- Reduce conflict response times by officials
- Agree on specific steps for resolution of a conflict incident
- Form a HWC resolution committee with warriors from each manyatta included

To help fund future Maasai Olympics events, please email donations@biglife.org.

EDUCATION

Big Life continues to provide support for local education, both through facilitating individual sponsorships (ranging from primary school to university and beyond) as well as supporting infrastructure and improvements of local schools and **paying 28 teachers' salaries**.

The Wildlife Scholarship Program is **currently supporting 187 students** from Mbirikani Group Ranch, from primary to tertiary level, and we are excited to announce that this program is expanding.



During the first quarter, with support from partners and donors, Big Life has:

- Employed a new Education Officer, to help generate scholarships through local tourist lodges around ANP, for Olgulului Group Ranch and Kimana Conservancy students.
- Provided twelve new student scholarships
- Of which, six girls, who are typically marginalized when it comes to education, received full scholarships for four years of secondary school from Mellman Foundation.
- One 14-year-old girl, who was to receive a scholarship, was nearly forced to marry instead of attending school, but Big Life intervened.
- School supplies, brought by visitors, distributed to local students (*pictured above*).

The major challenge of the Wildlife Scholarship Program is to generate as many scholarships for bright and poor students as the number of applications. If we are unable to fund each qualified student's tuition, young girls in particular are at an increased risk of dropping out of school and falling prey to early forced marriages.

We are also challenged with improving the performance of schools under the Kenya Certificate of Primary Education. Performance was dismal in the year 2016, with the majority of the primary schools performing poorly. The major contributory factors are:

- Lack of quality food in most of the local schools.

- High teacher-to-student ratio in the majority of schools. In some classes at the Enkijape School, for example, the ratio is as high as 1:98.
- Poorly-motivated teachers who are only paid a stipend, with the majority of the teachers' salaries in the range of \$100-\$150 per month. Government-employed teachers are paid in the range of \$270 per month and upwards.
- Lack of classrooms in the majority of schools, with some classes being portioned into two in order to accommodate large numbers of students.
- School drop-outs due to poverty.



Big Life's Education Officer listening to student discussions at Isinet Primary School

In addition to education scholarships, Big Life's in-school Conservation Education Program continues to engage students on the importance of conservation and natural resource management. Our Education Officer visited 11 schools across Mbirikani Group Ranch teaching students conservation-related topics and showing wildlife films. This quarter, we **engaged 988 teachers and students** on multiple topics and occasions. Presentation topics included the Amboseli ecosystem and its wildlife, waste and pollution, and the water cycle. Films shown were: *War on Poaching Part 2* by Let Elephants Be Elephants, *The Year of the Wildebeest* by Alan Root, and *Sunlight and Shadows* by Alan Root, among others.

A highlight this quarter, as in past quarters, was a visit to Amboseli National Park for 30 students and six teachers (*pictured below-left*), many of which have never been to the park, or had a positive experience with wildlife and seeing wildlife behaving naturally. These visits provide an opportunity to explain that

wildlife don't maliciously crop-raid, kill livestock, or injure/kill humans, but rather because people have invaded wildlife habitat and taking resources (like food and water) that they need to survive.



Finally, we would like to thank Laikipia Wildlife Forum and Lewa Wildlife Conservancy for enabling our Education Officer, Elizabeth, to spend four weeks with the organizations in Northern Kenya to learn about their conservation education programs, the topics they discuss, how they engage students and the public on important conservation issues and even hone her teaching skills with local visitors (*pictured above-right*). While there, she also visited the Mt. Kenya Wildlife Conservancy, William Holden Educational Centre, and Ol Pejeta Conservancy. Elizabeth gained knowledge and experience that enabled her to develop new lessons and activities to bring back to improve Big Life's Education Program.

If you are interested in sponsoring a student, or providing other educational support, please email donation@biglife.org.

PARTNERS & SUPPORTERS

The work detailed above is made possible thanks to the generosity of Big Life's donors and partner organizations, some of which are listed below. We are continually grateful for this support.

