

QUARTERLY REPORT: JULY - SEPTEMBER 2017

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

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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

Kenya Wildlife Service **KWS**

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

The end of the dry season is always a tense time for both people and wildlife, everything is in short supply, which manifests itself in many different ways. Hungry wildlife push the boundaries leaving safe areas in search of fodder, and worse, the irrigation fed tomato farms become irresistible. This inevitably leads to conflict. Bushmeat poaching also peaks this period, mainly driven by lack of economic returns in agriculture and therefore trade in bushmeat increases. Conversely, it's a time of plenty for predators as prey species and livestock are weak, roaming further in search of pasture. In this process we have seen depredation of livestock more than double.

This is the first season that the new 50 km elephant exclusion fence has been put to the test, and it has worked better than all our expectation: the farming areas it's protecting hardly had any incursions by wildlife, reducing recorded raiding in this area by over 90%, saving farmers thousands of dollars and saving many elephant from being speared. So this has been a great success and spurred us forward into Phase 2 of the fence, I need to thank all of you who have contributed, as we now have sufficient funds to extend the line another 58 kilometres, which we hope will begin in December.

Our rangers have been busy as you will see from the report: Big Life rangers arrested 96 suspects in 45 incidents of illegal activity. Of these, 54 suspects were arrested in 29 poaching-related incidents, including 26 suspected trophy dealers. Rangers recovered 338 kg of ivory from arrests. The number that jumps out at me here is the huge increase of arrests related to ivory dealers. This has largely been driven by the recent growth and training of our informer network, with arrests happening sometimes hundreds of kilometres away from our core area. It's a huge achievement and congratulations to Head of Security, Craig Millar, and his team for this success. At the same time, it's a stark reminder that the ivory trade is still alive and well, despite a dip in the black market price of ivory. It also underlines the fact that while ivory has any value, the killing will continue.

Supporting education has always been a priority for Big Life and our Wildlife Scholarship Program is growing: we now have 208 kids in school through this program. However, I always find one of the most challenging aspects of my job is the sifting through the of applications for these scholarships. Its heartwrenching to meet families who have sometimes sold their last cow to educate a son or daughter, only to have them sent away from school for falling behind in school fee payments. Once these kids are off the education ladder, there is little hope in getting them back on, and they come to us as a last and desperate resort. Support for this program would be much appreciated as it literally changes lives.

As always I need to thank you all again for your incredible support.

Ruhu

Richard Bonham,
Director of Operations, Big Life Kenya

EXECUTIVE SUMMARY

HIGHLIGHTS FROM THE 3RD QUARTER

WILDLIFE SECURITY

OVERVIEW: 38 Ranger Units • 220+ Trained Rangers • 300+ Field Staff 28 Outposts • 4 Mobile Units • 1 Rapid Deployment Unit • 2 Field Teams • 3 Permanent **Observation Outposts**

ACHIEVEMENTS: 96 suspects were arrested in 45 incidents. 338 kg of illegal ivory was confiscated. Only one elephant was poached, although five other elephants died. Three received treatment for injuries and one calf rescued. Twenty-six snares were recovered and destroyed before they could kill wildlife.

PROSECUTIONS

OVERVIEW: Seven wildlife crime cases were concluded, and 77 are ongoing.

ACHIEVEMENTS: 26 rangers received additional training on court procedure and evidence collection to improve prosecution success in the future.

HUMAN-WILDLIFE CONFLICT

OVERVIEW: There were 127 crop-raiding incidents of which 124 were caused by elephants. 37.5 acres were damaged, 36.7 of which were caused by elephants. There was the tragic loss of three humans to elephants.

ACHIEVEMENTS: Phase 1 of the elephant exclusion fence has reduced reported crop-raiding by over 90%. As a result we're scheduled to begin extending the fence by next quarter. One retaliatory hunt against elephants for property damage was stopped. Dedicated ranger units prevented 92 HWC incidents. Herders were compensated a total of \$56,001 USD for livestock that was killed by predators, and one lion hunt was successfully stopped.

EDUCATION & HEALTH

OVERVIEW: Big Life funds the salaries of 28 teachers and sponsors the school fees for 208 students.

ACHIEVEMENTS: Conservation curriculum reached 945 teachers and students. Two mobile clinics focusing on family planning were conducted on Mbirikani Group Ranch.

WILDLIFE SECURITY

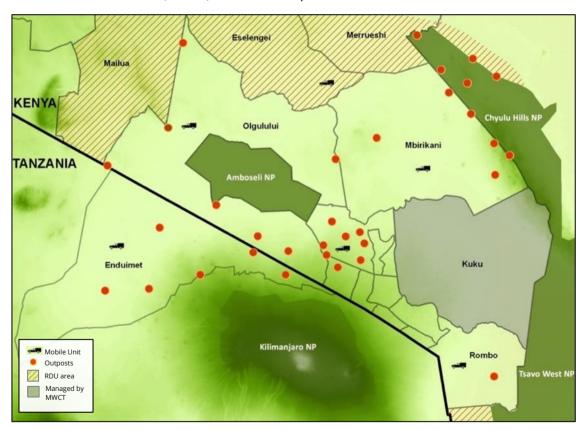
During the third quarter of 2017, Big Life rangers patrolled **22,793 km** by foot and **63,669 km** by vehicle.

Big Life rangers arrested 96 suspects in 45 incidents of illegal activity (details next page). Of these, 54 suspects were arrested in 29 poaching-related incidents, including 26 suspected trophy dealers. Rangers recovered 338 kg of ivory from arrests. Less than one quarter of the poaching-related incidents (trophy poaching, dealing, and bushmeat) took place inside 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), and 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 more than 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 currently being fully funded and managed by our partners at Honeyguide Foundation, and are no longer reflected in our statistics, although their work continues to be a critical part of conservation in the ecosystem.

On the Kenyan side of the ecosystem, there are 28 permanent ranger outposts, 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 <u>donations@biglife.org</u> for additional information.

RANGER TRAININGS

During the third quarter, 28 rangers received advanced training to improve their effectiveness, primarily regarding arrests and prosecutions.

Details:

- August 21: Twelve Big Life rangers attended a practical training at Maungu on first aid/bleeding control, arrest and search procedures and forensic techniques.
- September 27: Fourteen Big Life rangers, and six KWS rangers, completed a two-day training at Big Life headquarters on the Kenya Wildlife Act, crime scene evidence collection, and courtroom procedure to improve prosecution rates.

INCIDENTS & ARRESTS

		Incidents			Suspects Arrested				
Crime Category	tegory Crime Type		Aug	Sep	Total	Jul	Aug	Sep	Total
	Community threat	1	-	1	1	-	-	1	1
Community Crimes	Intention to steal	1	-	-	1	2	-	-	2
Crimes	Theft	1	1	2	4	3	1	4	8
Encroachment	Trespassing	1	2	-	3	1	3	-	4
Encroachment	Illegal grazing	-	1	1	2	-	3	1	4
	Logging	-	-	2	2	-	-	3	3
Habitat Destruction	Illegal water pumping	1	-	-	1	2	-	-	2
Desti uction	Sandalwood trade	1	-	-	1	1	-	-	1
Retaliation	Lion killing	1	-	-	1	17	-	-	17
	Bushmeat	7	1	3	11	14	1	10	25
	Intention to hunt	-	1	1	2	-	1	1	2
Poaching	Intention to snare	-	-	1	1	-	-	1	1
	Possession wildlife trophies	6	2	7	15	11	3	12	26
Total		19	8	18	45	51 12 33 96			96

CONFISCATED ITEMS

Item	Total
Axe	1
Bicycles	2
Bows	2
Handsaw	1
Ivory (kg)	338 kg
Kadoo lights	4
Leopard skins	3
Machetes	13
Motorbikes	7
Non-poisoned arrows	4

Item	Total
Poison	500 g
Poisoned arrows	7
Puff adder skin	1
Python Skin	1
Sandalwood	65 kg
Snares (general)	41
Snares (Rhino)	3
Torches	3
Vehicle <5t	1
Water pumps	2

WILDLIFE TROPHY INCIDENTS

Unfortunately, one suspected elephant poaching incidents occurred within Big Life's area of operation (AOO) during the third quarter. However, 26 people were arrested in connection with trading in wildlife trophies. All of the incidents below were joint operations between the Big Life intelligence unit and Kenya Wildlife Service (KWS), and all but three took place outside Big Life's AOO.

Details:

• July 6: A Big Life informer helped KWS officers arrest two suspects with 22 kg of ivory in Voi, Taita Taveta County (pictured below-left).





July 7: Informers helped arrest three suspects with 40 kg ivory in Voi, Taita Taveta County (pictured above-right).

July 17: Two ivory dealers were arrested at Maili Tisa, Mailua Group Ranch with nine pieces of ivory weighing 58 kg (pictured below-left).





- July 18: One suspect arrested with 8 kg ivory at Yinzau area, Makueni County (pictured aboveright).
- July 22: One suspect arrested with puff adder skin at Sultan Hamud, Makueni County (pictured below-left).





- July 31: Big Life intelligence helped arrest two trophy dealers with 44 kg ivory at Kasovoni area, Makueni County.
- **August 18**: One suspect was arrested with 16 kg ivory at Nthongoni, Taita Taveta County (pictured above-right).
- August 31: Informers helped arrested two suspects with 15 kg ivory at Kimana Town, Kimana **Group Ranch**

September 8: One suspect arrested with 14 kg ivory at llasit area, Kuku Group Ranch (pictured below-left).





- **September 13**: One suspect arrested with 55 kg ivory at Mwatate area, Taitat Taveta County.
- September 14: Rangers arrested one trophy poacher, with hunting equipment, before he could kill at Kari area, Makueni County (pictured above-right).
- **September 15**: One suspect arrested with a leopard skin in Emali town, Makueni County.
- **September 15**: Three trophy dealers arrested with 35 kg ivory at Mlolongo area, Machakos County.
- **September 16**: One suspect arrested with 6 kg ivory at Emali town, Makueni County.
- **September 21**: Three trophy dealers arrested with 25 kg ivory in Nairobi west area, Nairobi County (pictured below-left).





September 27: Two suspects arrested with two leopard skins and a python skin at Athi area, Makueni County (pictured above-right).

ELEPHANT MORTALITIES

Total dead: 6

Total dead within Big Life's Core AOO: 5 Total dead outside Big Life's Core AOO: 1

During the third quarter, six elephant mortalities were recorded; three were due to human-elephant conflict (HEC), two from natural causes, and one suspected poaching. Tusks were recovered in all cases.

Details:

July 20: KWS received information from a community member of an elephant carcass at Esarunoto area, Kaputei Group Ranch. Our Mobile 1 and Clinic teams rushed to the area and confirmed an adult male with two spear wounds, suspected as a result of HEC. Tusks were recovered (pictured below).



• July 22: An adult male elephant, named Ndawe, was previously treated for a spear wound in April, and since that time his condition deteriorated. In July, he was speared again, three times. The vet was notified for treatment at Olchani Orok area, Olgulului Group Ranch, but the bulls injuries were too severe, and recovery was unlikely, so the vet euthanized him. Both tusks were taken by KWS. Cause of death is suspected to be an opportunistic poaching attempt, due to Ndawe's already weak condition (pictured above-right).



- July 28: A sub-adult male elephant that was previously suspected to be ill was found weak and unable to move at Osewan area, Olgulului Group Ranch. It was euthanized by KWS who removed both tusks. Cause of death is suspected natural.
- **August 11:** A sub-adult male that was treated for a spear wound the previous day was found dead at Idonyo Wuarikoi area, Kimana Group ranch, possibly from either sepsis or a punctured chest cavity. Cause of death HEC. Both tusks were recovered.
- **September 15:** Rombo Unit received information from a community member of an elephant carcass at Sukuta area, Rombo Group Ranch. They immediately responded and discovered an adult male carcass with a spear in his side, killing him. It is suspected to have been a result of HEC. Both tusks were recovered (pictured below).





September 24: Rangers received information from an informer of an elephant carcass at Osewan area, Olgulului Group Ranch. They rushed to the area and confirmed a juvenile male carcass, suspected to have died of natural causes. Tusks had not yet developed.

ELEPHANT INJURIES

Treated in Big Life's AOO: 3 (with KWS & the David Sheldrick Wildlife Trust [DSWT] mobile veterinarian) Not treated: 4

Details of elephants treated:

- July 22: Ilmarba Unit came across an elephant (Ndawe) with multiple injuries at Olchani Orok area, Olgulului Group Ranch. The vet was called in to treated the bull of three spear wounds, however his injuries were too sever and his condition too bad that he was euthanized.
- August 3: Mobile 2 tracked elephant tracks with a blood trail from Isinet to Kimana conservancy, Kimana Group Ranch, where they found an adult male with a fresh spear wound on the left hind leg. The KWS vet was called in and successfully treated him of the wound. (pictured below).





August 9: Satao Elerai Unit found a sub-adult male elephant at Indapidapo area, Kimana Group Ranch with two spear injuries. The vet was alerted, but could not attend to the same day. The animal was treated the following day in the same area. Sadly, he died the next day.

Not treated:

- July 13: Osewan Unit came across tracks from an elephant herd with a blood trail at Olbua borehole, Olgulului Group Ranch. They were unable to locate the injured elephant.
- July 29: Risa Unit found tracks of an elephant bleeding at Risa area, Olgulului Group Ranch. They were unable to find the elephant.
- August 17: The RDU received information of an elephant that was seen having difficulty walking on the left hind-leg, on the outskirts of Emali town, Makueni County. They searched for the animal but were unsuccessful.
- September 25: Ilmarba Unit came across elephant tracks with a blood trail while patrolling Satao Elerai area, Olgulului Group Ranch, but they were unable to track it.

ELEPHANT RESCUE

Rescued: 1

September 11: Big Life's Head of Security, while on aerial patrol over Ormanie area, Olgulului Group Ranch, spotted a juvenile elephant wandering alone. KWS & Risa rangers successfully captured the baby. DSWT was called in to airlift it to their Nairobi orphanage.

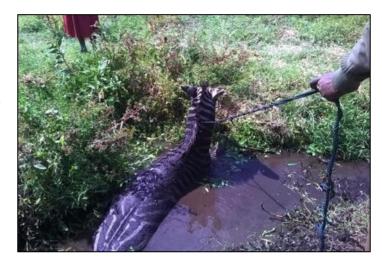


OTHER WILDLIFE RESCUES

Total rescued: 6

Details:

- August 15: Olepolos, Nailepu and Bravo 3 Units protected a python that the community suspected had swallowed a goat at Mwende area, Kimana Group ranch until a KWS vet and translocated it to Amboseli National Park. The python later regurgitated a dik-dik, not a goat.
- September 10: Mobile 1 pulled out a zebra that had fallen into an artificial waterhole at Isinet
 - shopping centre, Mbirikani group ranch. It was released in Kimana Sanctuary.
- September 11: Mobile 2 pulled out a zebra that was stuck in Marura stream, Kimana Group ranch (pictured right).
- **September 27:** Olepolos and KWS rescued a lesser kudu that fell into an artificial waterhole at Maisuvati area, Kimana Group Ranch. Unfortunately, it later died on the 30th.



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. Bushmeat poaching increased significantly over the reporting period, 27 suspects were arrested in 13 incidents (two additional incidents did not lead to an arrest). Higher poaching incidents this quarter is attributed to dryer conditions, before the rains arrive in October/November, as casual farming laborers are temporarily unemployed and poaching for income. Additionally, wildlife are concentrated during the dry season, and therefore easier to find near artificial water points. The table below details animals killed by poachers during the quarter.

	Dik-dik	Eland	Giraffe	Grant's gazelle	Hartebeest	Impala	Reedbuck	Zebra	Total
July	11	5	-	-	-	2	1	-	19
Aug	1	-	3	-	4	-	-	1	9
Sep	-	4	1	1	-	-	-	2	8
Total	12	9	4	1	4	2	1	3	36

Details:

- July 2: Big Life intelligence helped Kenya police officers arrest one suspect with dik-dik meat at Embirika area, Mailua Group Ranch.
- July 6: Mobile 2 and Olive Branch teams arrested three suspects with reedbuck meat at Marura area, Kimana Group Ranch.
- July 10: A Big Life informer reported two eland killed at Wivia area, Makueni County. A joint operation by Big Life's Chyulu Unit and KWS arrested two suspects at Kavoleni area cooking the meat.
- July 21: The RDU laid an ambush at Ilpartimaro area, Mailua Group Ranch, and arrested three suspects with three dik-diks and one impala carcass (pictured right).
- **July 27:** Ilmarba Unit received information from an informer of an eland that was killed at Imisigiyo, Olgulului Group Ranch on Jul 8. They responded immediately and discovered the carcass, which was killed by a snare, but had not been slaughtered yet. The team laid an ambush but the suspect never returned. Follow-up investigation led to the arrest of one suspect arrest at the same area 19 days later.



July 27: Mobile one intercepted a car at Olorika area, Kuku Group Ranch, and before they could inspect it three people fled, leaving behind the driver whom they arrested (pictured below-left). Inside the car rangers found machetes and kadoo lights indicating that they were on a hunting mission. Our Dog Unit was called in and tracked them to a point where they had killed a zebra but escaped with the meat.





July 28: The RDU laid an ambush and arrested three suspects at Kenyewa area, Kaputei Group Ranch with seven dik-dik carcasses and one impala (pictured above-right).

July 29: Joint operation by Big Life's Konatatu, Satelite and Olokurto teams arrested one suspect at Kasovoni area, Makueni County, with eland meat and seven snares (pictured below-left).





- August 10: Olokurto Unit arrested one person with hunting equipment at Maembe area, Chyulu Hills National Park (pictured above-right).
- August 25: The RDU intercepted a suspect on motorbike, but he escaped leaving behind 145 kg of giraffe meat at Sultan Hamud area, Makueni County.
- August 31: Konatatu and Satellite Units on a joint operation discovered three hartebeest carcasses, snared and slaughtered by unknown people in Kisula area, Chyulu Hills National Park (pictured left). Other snares were discovered and destroyed in the same area before they could kill.





- September 7: In a joint operation by Big Life's RDU and Mobile 1 teams, with MWCT rangers, arrested eight suspects with two eland carcasses at Inkisanjani, Kuku Group Ranch (pictured above-right).
- September 11: Big Life's Intelligence Unit officers helped KWS to arrest one suspected bushmeat trader in possession of bushmeat at King'oo area, Makueni County.
- September 15: Mobile 3 laid an ambush at Enkii, Mailua Group Ranch, and arrested one suspect with giraffe and Grant's gazelle meat in sacks.

September 27: A joint operation by Big Life's Satellite Unit, DSWT, and KWS arrested one suspected bushmeat poacher before he could kill. He was arrested with three snares and a sling shot at Metava area, Chyulu Hills National Park.

DE-SNARING

Forty-four snares were recovered during arrests and de-snaring patrols during the quarter. Three were cable snares targeting rhino and the rest were lighter gauge wire targeting small to medium mammals. Eighteen were discovered after killing wildlife. Twenty-six snares were recovered before they could kill.



HABITAT DESTRUCTION

During the third quarter, **six arrests** were made in **four incidents**.

Details:

- July 19: Rombo Unit arrested two people pumping water illegally from Tsavo River at Inkiito area. The area chief warned the suspects and asked our rangers to release them.
- July 19: Rangers arrested one sandalwood trader at Soto Kaunguni area, Makueni County with 65 kg sandalwood.
- September 9: Rangers found two school children at Kyenze area, Chyulu Hills National Park with several logs for woodcarving. Two women escaped. Children were taken to the chief and their parents were warned.
- September 12: One woman arrested who had escaped two days before at Kyenze area, Chyulu Hills National park leaving behind several logs meant for woodcarving.

COMMUNITY CRIMES

Big Life rangers continue to assist the community in apprehending various non-wildlife-related criminals. During the quarter, rangers arrested 11 suspects in six incidents:

Details:

- July 19: Ilmarba Unit arrested three people for stealing electric cables from Kimana camp, Kimana Group Ranch.
- July 31: Olepolos Unit arrested two people suspected of intending to steal donkeys for sale/slaughter at Sopa area, Kimana Group Ranch.
- August 30: Satao Elerai Unit arrested one person for stealing a goat at Elerai area, Kimana Group Ranch.
- September 10: Mobile 1 arrested one mentally unstable man who was scaring school children at Mpooncho area, Mbirikani Group Ranch.
- September 14: Esiteti Unit arrested two people at Inkarauni area, Olgulului Group Ranch, for stealing donkeys.
- September 29: Rombo unit arrested two people at Elerai area, Rombo Group Ranch for stealing goats and sheep.

HUMAN SEARCH & RESCUE

Big Life's AOO is mostly wilderness. Big Life rangers are often requested by the community to help in searches for missing persons, or they come across lost people during patrol. Often, such incidents involve people who lost their way (especially children out herding livestock) and sometimes adults with mental illness that lead to wandering behaviour. During the quarter, three people were found in three incidents.

Details

- July 3: Esiteti Unit rescued a mentally unstable man at Loolotikoshi area, Olgulului Group ranch.
- July 19: Ilmarba unit rescued a mentally unstable woman at Imisigiyo area, Olgulului Group ranch.
- September 17: Mobile 1 found a mentally unstable man at Lenkiloriti area, Mbirikani Group ranch.

PROSECUTIONS

During the third quarter, Big Life's Prosecution Officer regularly attended courts cases across the region to monitor wildlife-related crime cases that Big Life rangers or intelligence were involved in.

Seven wildlife-crime cases were concluded during the quarter:

Date	No. Suspect	Crime	Remarks
5-Jan-16	2	Bushmeat poaching - zebra	Magistrate released the suspects. On what grounds, to be confirmed.
14-Apr-16	1	Ivory possession	Case coming up in October for him to be released. Opportunistic ivory arrest.
15-May-16	3	Bushmeat poaching - Giraffe	Fined \$2,000 or imprisonment for two years
4-Aug-16	1	Bushmeat poaching - Giraffe	Magistrate released the suspect. On what grounds, to be confirmed.
7-Aug-16	2	Bushmeat poaching - Grant's gazelle	Fined \$2,000 or imprisonment for two years.
25-Sep-16	1	Ivory possession	Released (acquitted), waiting confirmation on what grounds.
2-Oct-16	2	Ivory possession	Magistrate released the suspects. On what grounds, to be confirmed.

The summary table below outlines the **77 ongoing cases that are** being monitored:

Crime	No. incidents	No. Suspects
Bushmeat poaching	19	49
Elephant spearing	2	3
Habitat destruction	3	7
Illegal Trespassing	1	5
Lion poisoning	1	2
Poaching intention	6	6
Trophy possession (ivory)	33	63
Trophy possession (skin)	6	7
Trophy possession (unknown)*	6	11

^{*} Big Life's Prosecutions Officer is still following up with KWS and Police to get details regarding items confiscated in 'Trophy Poaching (unknown)' cases.

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. 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 donate now to help us to achieve IPZ status in this critically-important rhino habitat.

RHINO INCIDENTS

3 snares, targeting rhino, were recovered during the quarter

September 13: Olemantai Unit discovered an adult rhino carcass inside Chyulu Hills National Park. Death estimated to be more than two years ago. Cause of death suspected poaching, but exact cause undetermined due to decomposition. Horns were not recovered. All identified rhinos (7) have been confirmed alive. It was concluded that this individual was not known to monitoring teams, and therefore was not included in the current population number.

RHINO MONITORING

During the quarter, monitoring teams had three direct rhino sightings, 10 indirect sightings (via camera trap), plus 104 sightings of spoor. (Dixon pictured below)



HUMAN-WILDLIFE CONFLICT

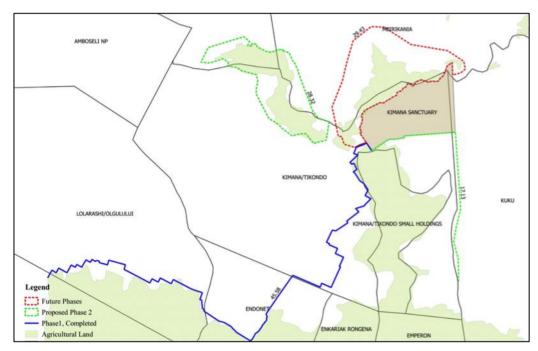
Human-wildlife conflict (HWC), specifically human-elephant conflict (HEC), continues to be the most significant threat to the ongoing conservation of wildlife within the Amboseli-Tsavo-Kilimanjaro ecosystem. HWC takes on three primary forms across Big Life's AOO. The first type is raiding of crops by wildlife, largely elephants. The second form of HWC occurs when predators kill local pastoralist' livestock (detailed under 'Predator Protection'). The final form is when wildlife causes injury or death to humans. All three forms of HWC can (and do) incite deadly retaliatory attacks by the affected community. Incidents in which people are injured or killed appear to be happening more frequently, which has led to increased retaliation against and mortality of elephants. We are actively working to reduce HWC, particularly with the elephant exclusion fence described below. During the quarter, there was one retaliatory hunt against elephants, which was fortunately stopped by our rangers.

• July 26: RDU successfully stopped an elephant hunt that nearly broke out at Oloikara, Kaputei Group ranch. Thirty-six elephants had destroyed a boma and a thorny fence. The rangers were able to calm the community.

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, particularly elephants.

Phase 1 of fence construction (shown in the map below), from the Kitenden corridor to the wildlife corridor north of Kimana town, was completed in April, and farmers have seen an immediate difference in the reduction of elephants raiding crops. As expected however, elephants have been getting around the fence at the open ends, which emphasizes the importance of extending fencing as soon as possible.



Map: Completed HEC mitigation fence - Phase 1 (blue line); proposed Phase 2 (green line) - note exact alignment to be agreed; future fence phase (red line) – alignment to be determined

Phase 1 secures 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) and is reducing 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 the remaining fence phases are complete, they 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.

During the third quarter, routine fence maintenance on Phase 1 continued. Fence teams are working well with communities and repairing minor damage caused primarily by eland and giraffe. Additionally, five initial community sensitization meetings were held in areas expected to be part of Phase 2,

particularly regarding fence alignment. Partners Tawi Lodge successfully raised funds for 7km of fence along the Kilitome Conservancy boundary, which will ultimately connect with the fence during phase 2.

HUMAN-ELEPHANT CONFLICT & CROP-RAIDING

This quarter coincides with the long dry season, when agricultural areas are limited to those that have permanent water availability, primarily along permanent swamps, which are used for irrigation. Wild animals, particularly elephants, are drawn to the water and fodder available in these farms, as resources elsewhere become increasingly limited, often resulting in conflict. The HEC mitigation fence is already having an important impact in protecting the farms on the lower slopes of Kilimanjaro from elephant crop-raiding, but the areas outside the fence remain vulnerable. Out of the 127 recorded crop-raiding incidents in which damage occurred, elephants were responsible for 124 incidents, and damaged 36.7 of the total 37.5 acres of crops. (see map next page)



Elephants foraging just outside community farms - Photo: Ryan Wilkie

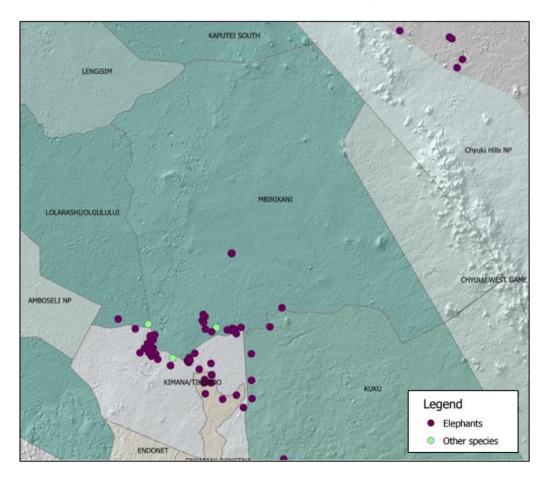
Big Life also mobilized community members to assist in the coordination and increased preemptive deployment of crop-protection rangers to select areas near routes commonly used by elephants. As a result, our rangers **prevented 92 incidents** before the animals could cause any damage, and before anyone (human or elephant) was harmed.

Specifically, in a joint project with KWS, Save the Elephants, Amboseli Trust for Elephants, and Wildlife Direct, Big Life has been using tracking technology in the form of a satellite collar and associated app to track a well-known crop-raiding elephant named Tim. Big Life rangers have been following Tim for the past year. He was collared on September 10th, 2016 amid concerns that his habit of raiding farmers' crops presented a real and present danger to his life. The collar allows rangers to conduct nightly counter patrols to deter Tim from raiding farmers' crops. Over the past three months, Tim made **56 attempts** to cross into cultivated areas for the purposes of foraging on crops. Our rangers were able to successfully intercept Tim and prevent him from causing damage to farms in just under half of these raiding incidents, solidifying the excellent progress demonstrated/made over the previous quarter.

Number of incidents and acres damaged per crop species:

Crop	Incidents	Area damaged (Acres)
Beans	9	2.75
Cabbage	1	0.25
Kale	1	0.25
Maize	43	8.5
Onions	2	0.5
Other vegetables	3	3.5
Peas	21	15
Miraa	1	0.5
Tomatoes	30	6
Watermelon	1	0.25
Other damage*	15	-
Total	127	37.5

^{*} Represents incidents in which minimal damaged occurred.



Map: Areas impacted by wildlife crop-raiding in the Amboseli ecosystem from July-September 2017

HUMAN INJURIES & DEATH

During the third quarter, three incidents involving elephants led to the tragic death of three people, while five people suffered injuries from elephant (1) and other wildlife [hyena (2) and lion (2)]. The three deaths were inside our Core AOO. Two injuries were inside our Core AOO, and the remaining three were outside our AOO

Details:

- July 1: An elephant killed a man at Engong Narok area, Olgulului Group Ranch.
- July 13: A hyena at Lumbua area, Mailua Group Ranch, injured two herders. The community retaliated by killing the hyena.
- July 15: A lion injured a herder who was looking for lost livestock at Porini area, Eselengei Group Ranch. Our RDU took him to hospital.
- July 28: A hyena injured a herder at Nasipa area, Kaputei Group Ranch.
- August 2: A lion injured a herder at Lenkolong area, Olgulului Group Ranch.
- August 17: An elephant killed a man at Maarwe area, Rombo Group Ranch.
- August 23: An elephant killed a man at Enkaji Naibor area, Mbirikani Group Ranch.
- September 22: An elephant injured a man at Entepesi area, Rombo Group Ranch.

Big Life has a Wildlife Conflict Scholarship fund to help support the families impacted by these unfortunate deaths. Please donate now if you would like to contribute.

HABITAT PROTECTION

GRAZING MANAGEMENT

Big Life has been working with communities on a few initiatives regarding improved land management and grazing. Grazing plans are an important first step towards rehabilitating the rangelands of the ecosystem. The ultimate goal is to restore the rangeland system to a significantly higher level of productivity and as a result keep the livestock economy as profitable as possible. That is because pastoralism is the only widely viable land-use option that is truly compatible with wildlife conservation, and any interventions that incentivize well-managed pastoralism will bring conservation benefits.

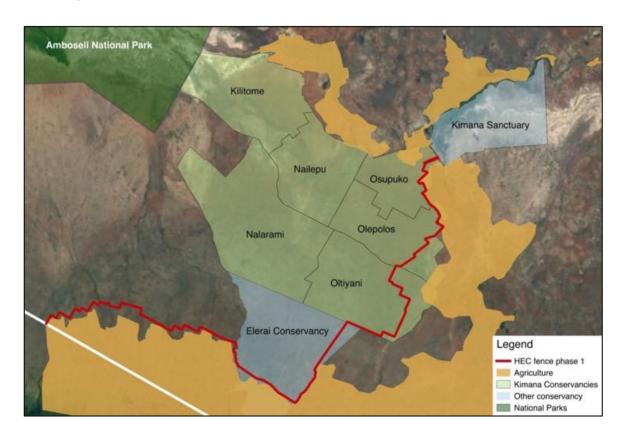


During the third quarter, Big Life continued to support the community in developing a grazing management plan, and progress on this is being made. As part of the process of building community capacity for managing grazing resources Big Life facilitated the training of 11 leaders and grazing committee members on holistic rangeland management at Mara Training Institute.

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. The extension of these leases was only possible thanks to the generous support of the DSWT, who provided the funding necessary to secure this critical part of the Amboseli ecosystem.



In the third quarter, Big Life officials investigated concerns regarding 46 land parcels, in the Osupuko Conservancy, which may have been illegally sold, and therefore has implications for the signed lease agreement and payments. All but two plots had issues (i.e. were either sold to outsiders, transferred to others within the conservancy, subdivided and partially sold, or incorrect information at the Kajiado Lands Office). The investigation of other land parcels and illegal sales within all the conservancies will continue. Community sensitization within the conservancies, which will be impacted by Phase 2 of the HEC mitigation fence (detailed above), also began during the quarter. Meetings over the fence alignment, the Environmental Impact Assessment and annual maintenance payments were had. Additionally, discussions with KWS regarding the legalization of the ALOCA land-management plan and KWS identified steps moving forward.

PERMACULTURE

The Maasai have not traditionally been a farming community, but some areas within the ecosystem 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 (legally and illegally) the Mbirikani water pipeline (fed by melt water from Kilimanjaro) for irrigation. The result has led to 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 young men, 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 whom deal with HWC on an ongoing basis. Ideally, the project will also increase income to local farmers through improved marketing structures.



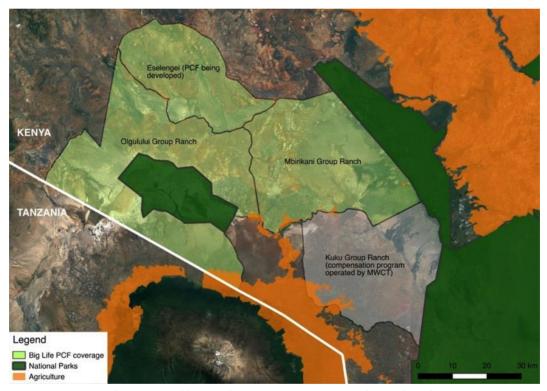


During the third quarter efforts have continued to develop the crop diversity within the existing farms as well as expand marketing efforts. Two farms are fully functional, one at Enkijape Primary School and another run by a women's group outside the town of Isinet. Both of these farms are now supplying organic produce to local lodges and Big Life is working to create further opportunities for the farmers within other local lodges. A group of Big Life staff and local farmers involved in the project visited the Save the Elephants' Elephants and Bees project near Voi, with the intention of assessing whether the technique was viable in our areas for both producing income from honey, and protecting farmers' crops from elephant raids (pictured above). Over the coming months, the next farm in Namelok will be planted, and further training done with the community group that has established it.

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 third quarter of 2017:

	Cattle	Shoat	Donkey	Total	USD
CHEETAH	16	153	•	169	6,341
ELEPHANT	1	ı	1	ı	-
HYENA	301	637	14	952	34,381
JACKAL	ı	180	-	180	3,562
LEOPARD	10	9	-	19	2,251
LION	53	18	1	72	9,466
TOTAL	380	997	15	1,392	\$56,001

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 teams stopped one lion hunt.



LION HUNTS STOPPED

Details:

• July 24: Community members reported a pride of lions that broke into a boma and killed some cows the previous night at Narok Lukuny area, Mbirikani Group Ranch. Rangers responded immediately and confirmed three cows were killed but by hyenas. Some community members attempted to retaliate, but Big Life's Clinic and Mobile 1 teams, together with community elders, stopped them (pictured right).



PREDATOR MORTALITIES

Seven predator mortalities were recorded during the quarter. All mortalities were from conflict-related incidents, primarily by non-PCF communities.

Details:

- July 3: A cheetah was chased into a fence by community members in Kimana Group Ranch. It broke its leg and KWS euthanized it.
- July 13: A hyena at Lumbua area, Mailua Group Ranch, injured two herders, and community members retaliated by killing the hyena.
- July 16: A lion killed two cows in Eselengei conservancy, after lion injured a herder the previous night. Warriors retaliated killing three cubs. All 17 morans involved in the hunt were arrested (pictured right).



- July 24: A very old hyena chased school children near Orbili borehole to their school, Mbirikani Group Ranch. The community killed it with stones and spears.
- July 28: A hyena injured a herder in Nasipa area, Mbirikani Group Ranch, and killed five goats. KWS rangers euthanized it.

MORAN EDUCATION INITIATIVE

While 2017 is an 'off' year for the Maasai Olympics (MO), 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 MO 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 third quarter, a formal meeting was held with Menye Layiok and warrior chiefs (pictured below) to discuss ways to engage warriors during this MO 'off' year, as well as proposed training for MO coaches. Leaders continue educating warriors on the importance of moving away from lion killing as a way of demonstrating bravery, and instead embrace sports and support conservation.



To help fund future Maasai Olympics events, please donate now.

EDUCATION & HEALTH

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 208 students** (115 girls & 93 boys) from Mbirikani Group Ranch, from primary to tertiary level, and we continue to promote the expansion of the program to neighbouring ranches.

During the third quarter:

- Provided 15 new student scholarships seven girls and eight boys (girls pictured below-left)
- Three students graduated from college and university with degrees in Business Information Technology, Economics and Statistics and a Lab technician.
- Added a new primary school that Big Life supports, now totalling 29.
- Continued engagement, through presentations and brochures, with guests at local lodges around Amboseli National Park to generate scholarships for students from Olgulului Group Ranch and ALOCA.
- Big Life carried out a Needs Assessment as well as a teacher qualifications audit across the schools in Mbirikani to help inform future decisions on resource allocation and school improvements.
- Distribution of school supplies, games, and clothing provided by Ol Donyo Lodge guests (*pictured below-right*).





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 13 schools** across Mbirikani Group Ranch teaching students conservation-related topics and showing wildlife films. This quarter, Big Life **engaged 945 teachers and students** on multiple topics and occasions. Presentation topics included the Maasai and Human Wildlife Conflict, the food chain and water cycle, and waste and pollution. Films shown were: *Elephants in Peril, Why elephants have a trunk,* and *The War on Poaching (tracker dog film)*. Among other activities, students were given a few tree seedlings to plant at each school, as part of the lesson on the water cycle and deforestation (*pictured below-left*).

A highlight this quarter, as in past quarters, was a **visit to Amboseli National Park for 30 students and six teachers** (*pictured below-right*), 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.





If you are interested in sponsoring a student, or providing other educational support, please donate now.

HEALTH

Big Life is working with partners Dandelion Africa, funded by Chase Africa, to facilitate mobile clinics focusing on healthcare and family planning in local communities within our AOO. During the quarter, two clinics were held on Mbirikani Group Ranch (Isinet and Imbirikani town) that reached hundreds of men, women, and children (pictured below).





PARTNERS & SUPPORTERS

Stichting Wildlife

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.

