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HORSE PATROL TEAM FINAL REPORT 2017



## Mounted Horse Patrol Anti-Poaching Unit for Mount Kenya

## Names of Investigators, Affiliation & Contact Info

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## Short and Long Term Goals of Horse Patrol Team

The overarching goal of the Horse Patrol Team (HPT) is:

To enhance the capacity of law enforcement personnel to decrease the level of poaching and other illegal activities mainly but not limited to the high altitude areas of the northern section of Mount Kenya's protected ecosystem.

Along with law enforcement, the short-term objectives are:

- To decrease the prevalence of illegal activity, in particular elephant and bush meat poaching in the northern areas of Mt Kenya National Reserve e.g. destroying snares, arrests, deterrence.
- To work collaboratively with the Kenya Wildlife Service (KWS) and Kenya Forest Service (KFS) to extend the area of surveillance into Meru and Sirimon which have seen a marked increase in habitat and wildlife destruction in high altitude zones e.g. GPS training, installation of satellite camps to cover greater distances, data collection.
- To increase awareness and conservation education within the communities living in and around Mt Kenya Park e.g. HPT visual presence is distinct with surrounding community.
- To improve the links with wildlife NGO to reduce response times for illegal incidents, improve
  intelligence gathering and information sharing e.g. engaging local scouts, local community
  conservation sensitization, Rhino Ark Mount Kenya fence teams.

# **Conservation Needs**

The HPT is an anti-poaching, mounted unit that patrol the northern region of Mount Kenya National Park and Reserve, managed by MKT and KWS.

Mount Kenya Trust (MKT) was established in 1999, due to growing concern for the forested expanse surrounding Africa's second highest mountain. Extensive poaching of wildlife, logging of indigenous tree species, overgrazing and large scale growing of marijuana were destroying the region.

The World Heritage Site Commission recognised the area as an UNESCO site in 1997 and describes it as "one of the most impressive landscapes of Eastern Africa, with its rugged glacier clad summits, Afro-Alpine Moorlands and diverse forests, which illustrate outstanding ecological processes."

The forest zone is one of the largest single contiguous forest remaining in Kenya and is a biodiversity hotspot. It is also an ecological transition region that links Mt. Kenya with the arid flat savannah lands of northern Kenya (Samburu and Laikipia). It is uniquely situated between state owned forest reserves, private conservancies and community owned rangelands.

Today the MKT undertakes its work across several thematic areas, including but not limited to antipoaching and illegal activity reduction, human wildlife conflict mitigation and habitat connectivity projects, environmental education and community health projects.

The HPT was set up on the understanding that KWS does not have sufficient man power to effectively monitor the large expanse of the mountain area (around 2100km²). Only through daily and regular security patrols can this site be saved from illegal destruction. All suspicious incidents or person and all illegal activities found to MKT supervisor and KWS and acted upon accordingly.

#### **MKT Vision**

The Integrity of the Mt Kenya ecosystem for the welfare of all who depend on it.

#### **MKT Mission**

To drive collaborative action for the sustainable management of Mt Kenya's biodiversity and natural resources through partnership with government, communities and civil society

#### **MKT Values**

The organization has earned the trust of its partners through its integrity and the dedicated work of its field teams and management. Upholding these values is important to the organization and it believes its small size and clearly defined focus area will help it to maintain its critical relationships with key stakeholders.

Mount Kenya straddles the equator almost 200km north-east of Nairobi. Standing at 5199m it is Africa's second highest after Kilimanjaro and one of three locations left in Africa where glaciers remain. The conservation importance is critical. It shows outstanding biodiversity with 81 endemic plant species and mammals such as the mole-rat with other wildlife species of IUCN concern such as the Mountain Bongo. There is an impressive array of birdlife including the green ibis (local Mount Kenya race) and near endemic alpine swift. Vegetation varies with altitude and rainfall with thick forests, bamboo zones, grassy glades, moorlands, tussock grasslands and sedges.

Not only for wildlife, Mount Kenya is a key water tower for the entire country with 50 per cent of the country's water basins supplied from its peaks. UNESCO notes that the 'establishment of the corridor and regional linkages via several conservancies to link with Samburu National Park, Shaba National Reserve and Buffalo Springs to the north and beyond...is a significant proactive intervention to mitigate climate change impacts on the biodiversity of this region of East Africa providing mobility for biodiversity to adapt to changing temperature and rainfall regimes.' Elephant populations in the region consist of the Mount Kenya National Reserve, home to an estimated 2,600 elephants (Vanleeuwe, 2016); the Laikipia-Samburu population, which is estimated at 6,400 elephants (Ngene et al., 2013) and the Meru population, which is estimated at 270 (Mwangi et al., 2007).

## Summary of Goals and Objectives

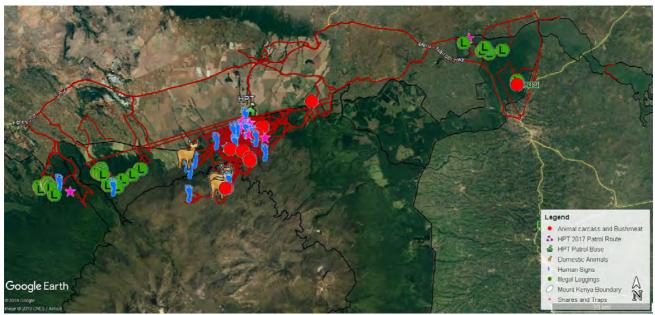
- Improved collaboration with the main state agencies KWS and KFS on law enforcement
- More effective GPS data collection and analysis of performance through the Spatial Monitoring And Reporting Tool (SMART).
- Better intelligence gathering from local community
- Monitoring of community forestry within the Reserve
- Better targeted coverage of patrols
- Improved responses to disasters especially perennial fires
- Improved awareness and sensitisation amongst general public

## Actions taken

## 2017 highlights include:

- The second successful 'Three Peak Challenge' in March, a local fundraising event for the Horse Patrol Team and Kenya Wildlife Service, raised almost KSh2million!
- The MKT team found a pair of Mackinder's Eagle Owls. They were rescued and sent to the Raptor Rehabilitation Centre (RRC) in Nairobi and towards the end of 2017, the two were grown up and ready to be released back onto the mountain! The HPT found another owl in September, which is now growing up at the RRC, to hopefully be released soon!
- A new satellite camp funded by The Rufford Foundation. In November 2016, support was approved for a pilot HPT satellite camp construction and preliminary patrols to be led from a new base at KFS Mucheene Forest Station. The design of the satellite camp is made up of four very simple structures. The first are two prefabricated aluminums 'uniports' unit used extensively in Kenya for semi-permanent housing. Each unit can accommodate up to four persons on army style cot beds but one half of the units is going to be used as a store. The structures have been placed on concrete plinths to make them more stable and so that they last longer. For both warmth and aesthetics, they will eventually be clad, but further funding will be required to add some form of insulation. The stables have been constructed using offcuts using on our existing stables at the HPT base as a basic design with an open area outside for tacking up, checking, and grooming the horses. The store was secured with lockable doors so that the team can leave food and equipment safely when they are not in the area. A small kitchen area has been added next to the stables.
- Elephant pit and cable snares were destroyed by the HPT, along with fires and illegal grazing controlled.

# Summary of Progress



Map 1 to show HPT patrols and findings in 2017.

## Satellite camp

When the camp was near completion, a suspected poacher gang was caught trying to remove parts of the corrugated iron roof of the steel uniports and threatened to destroy the camp. They were carrying crude spears used to kill elephants and were apprehended by an employee of the community water project that is based close by. Our Northern Area Supervisor was called immediately and responded by calling the nearest KWS team to assist with finding the gang. They made the journey to patrol the area on two separate days. Due to a higher security threat, the HPT have been unable to patrol immediately in the area but joined KWS on the patrols. The last one was between the 22<sup>nd</sup> and the 27<sup>th</sup> of November. The patrols uncovered active logging and charcoal sites, bushmeat snares and traps and it is very clear more of a presence is required in the area. This camp will be crucial for security around the notorious poaching area for the next year.

#### **Conservation Outcomes**

Joint patrols with KWS will be carried out from the base with members from a number of the MKT teams or individual teams including the HPT. Patrols carried out with armed KWS rangers will be necessary until the area is more secure. Our aim will be to make as many arrests as possible in the first six months of local patrols to deter habitat and wildlife destruction. Illegal activity will be reported to the Mucheene Forester and senior staff for both KWS and KFS on a monthly basis via our monthly reports.

The team record the number of patrol hours, distance covered and illegal activities found using the Spatial Monitoring And Reporting Tool (SMART). This computer software package is designed to provide data outputs on wildlife and security issues for protected area managers thus allowing improvements in anti-poaching efforts, overall law enforcement and ranger effectiveness through the features it provides. The data collection system is based around the app 'Cyber Tracker'.

Using this app data is input onto a GPS enabled smart phone or tablet so all patrol data and efforts are automatically geo-referenced. This data is then uploaded monthly onto a central database which can be automatically analysed through in-program designed reporting tools.

SMART makes it possible to collect, store, communicate and evaluate data on wildlife data, patrol efforts (e.g. time spent on patrols, areas visited and distances covered), patrol effectiveness (e.g. snares removed, arrests made) and threat-levels within a protected area (e.g. hotspots of illegal activity).

Patrol teams collect and record data on where they go and what they see while on patrol, such as threats (e.g. poaching signs), patrol results (e.g. arrest, confiscations of weapons), and wildlife observations. Patrols report their patrol activities and patrol data and routes are checked. Patrol data are stored in a SMART patrol database. Data are processed into highly visual tables, charts, and maps showing patrol effort, coverage, and results, forming the basis for patrol analysis and evaluation.

Successful conservation of elephants on Mt Kenya should focus not simply on the animals alone but on the larger biodiversity goals. Two factors have a large effect in determining the future of elephants; poaching or hunting and competition for or conversion of land by people. Only by protecting the habitat and protected areas, along with tackling the ivory trade and hunting, can elephants continue to roam freely in the wild.

## List major findings and accomplishments to date

| Type of Patrol   | Horse | Foot | Vehicle |
|------------------|-------|------|---------|
| Number of Patrol | 139   | 87   | 23      |
| Hours patrolled  | 735   | 344  | 53      |
| Distance covered | 1599  | 792  | 797     |
| (km)             |       |      |         |

Table 1: Patrol effort

Distance covered include vehicle, foot and horseback patrols. As expected, the majority of the team's patrols were conducted on horseback, followed by the vehicle patrols then foot.

| People<br>Observed |          | Arson Fire<br>(ha) | Non-timber Forest<br>Products | Shelter/Ca<br>mp | Pollution |
|--------------------|----------|--------------------|-------------------------------|------------------|-----------|
| Direct             | Indirect |                    |                               |                  |           |
| 22                 | 13       | 16                 | 2                             | 1                | 1         |

Table 2: Breakdown on Illegal human activities observations.

A total of 22 people were directly encountered in the last one year within the Reserve, most of which were in Kenya Forest Service agro forestry areas. No arrests were conducted by the team. Indirect encounters of people were mostly the human signs including fire places and foot prints, mostly for illegal honey harvesters in those areas. These were aged as fresh to recent signs.

The team also found and destroyed one abandoned medium sized illegal shelter suspected to have been used by the poachers/ hunters in the area.

The team found two incidences of illegal honey harvesting whereby 16 hectares of land was burned by the arson fire. The team suspected some to be caused by illegal honey harvesters as well as community piping who left fire unattended. Another illegal activity recorded by the team was pollution by littering.

The team came across almost 1000 domestic animals in the Reserve. Type of domestics found were cows, sheep and goats. All were unpermitted and therefore were all evicted.

| Cable Snare | String Snare | Wire snare | Pit trap |
|-------------|--------------|------------|----------|
| 2           | 3            | 9          | 1        |

Table 3: Snares and Traps categories found and destroyed

Most of the snares found and destroyed were wire snares targeting medium sized to small sized mammals. A total of 15 weapons and equipment have been so far destroyed by the team in the year. These included cable and pit traps for elephants.

Logging categories captured in the past one year included logging for charcoal, fence posts timber pieces and firewood. A majority of these the team recorded when they were on camping patrols in Sirmon or when called upon to reinforce Imenti patrol team. Tree species targeted were majorly the indigenous species such as Podo, Red Cedar, Wild Olive and some unknown indigenous species.

| Charcoal Firewood bundles Kilns |   | Timber Pieces | Fence<br>Posts |
|---------------------------------|---|---------------|----------------|
| 17                              | 2 | 23            | 63             |

Table 4: Illegal logging activities observed

A total of 17 charcoal kilns were recorded in the areas the team patrolled in the year, some had been harvested and charcoal transported, in some incidences the kilns were still baking which were destroyed. Logging sightings ranged from very old sites to fresh sites. Fence posts made a majority of the illegal logging, where a total of 63 logs were recorded, including logging sites. Cut timber pieces as well as 'ready for making' the kilns were also destroyed.

| Animal Carcass | Bushmeat (kg) | Injured animals |
|----------------|---------------|-----------------|
| 2              | 100           | 4               |

Table 5: Animals categories observations

Carcasses included a duiker and zebra carcasses. Other incidences were four incidences of over 100kg of bushmeat from zebra, eland, elephant and intestines from unknown species, along with another four incidences of four injured Burchell's zebra animal.

# Financial report

| Budget Item                       | Unit | Cost  | Total<br>Proposal<br>2016 | Actuals<br>2017 | Actuals<br>2017 | Total  |
|-----------------------------------|------|-------|---------------------------|-----------------|-----------------|--------|
|                                   |      |       |                           | IEF             | Other partners  |        |
| Project Personnel                 |      |       |                           | USD\$           |                 |        |
| Salaries                          | 72   | 137   | 9,864                     | 1,130           | 8,991           | 10,121 |
| Northern Sector<br>Supervisor     | 4    | 450   | 1,800                     | 0               | 1,645           | 1,645  |
| Programme Officer                 | 3    | 1,000 | 3,000                     | 1,000           | 1,406           | 2,406  |
| Medical                           | 6    | 67    | 402                       | 286             | -               | 286    |
| Insurance                         | 6    | 109   | 654                       | 641             | -               | 641    |
| Meals                             |      |       |                           |                 |                 |        |
| Rations - team & N.<br>Supervisor | 76   | 30    | 2,280                     | 2,000           | 867             | 2,867  |
| Horse feed - hay, oats,           | 12   | 201   | 2,412                     | 2,412           | 1,007           | 3,419  |

| barley  |       |       |        |        |        |        |
|---|-------|-------|--------|--------|--------|--------|
| Equipment   |       |       |        |        |        |        |
| Uniform & team equipment  | 6     | 175   | 1,050  | 1,100  | 476    | 1,576  |
| Horse equipment   | 1     | 700   | 700    | 700    | 482    | 1,182  |
| Services  |       |       |        |        |        |        |
| Veterinary costs<br>\$300/year  | 1     | 300   | 300    | 1416   | 977    | 2,393  |
| Training of horse and horsemen  | 1     | 800   | 800    | -      | -      | -      |
| Transport costs for fuel and vehicle maintenance  | 5,400 | 1     | 2,808  | 2,619  | -      | 2,619  |
| Misc.   |       |       |        |        |        |        |
| General housing & stable repairs  | 1     | 700   | 700    | 700    | 310    | 1,010  |
| One off costs - Pit latrine & Land Rover vehicle tyres contribution                     | 1     | 1,000 | 1,000  | 1,000  | -      | 1,000  |
| Operational Costs -<br>Admin, Accounting,<br>Telephone, Reporting &<br>Monitoring @ 15% | 1     | 3,000 | 3,000  | 0      | 3,000  | 3,000  |
| Satellite camp  | 1     | 6,772 | 6,772  | 0      | 6,772  | 6,772  |
| Total   |       |       | 37,542 | 15,004 | 19,160 | 40,936 |

# Images



Horses in the forest.



A dry start to the year caused dangerous fires on the moorlands.



A moody mountain and moorlands.



An elephant grazing on the mountain.



Moving into the elephant corridor.



Hoof maintenance.



Illegal grazing on burnt moorland.



A ranger with a HPT pony.



A mother and her calf.



Elephant grazing on the edge of the forest.



Elephant family in the corridor.



A baby elephant moves safely through farmlands.



Illegal honey harvesting found by the team.



Beating out fires on the moorlands.



Snares found by the team.



Illegal honey harvesting in the forest.



The new stables at the Mucheene Satellitte camp.



The ranger houses at the new camp.



Illegal water pipes set by communities on the moorland.



Ranger and his ponies.



Camping patrols by the team and ponies.



Fire fighting team.