

MARA PREDATOR CONSERVATION PROGRAMME



QUARTER
3 REPORT | 2020



EXECUTIVE SUMMARY

The research team initiated its annual intensive monitoring session, which will result in updated lion and cheetah densities for 2020. The collaring efforts continued and we successfully deployed three lion collars on adult pride females this quarter. We recorded more cheetah births and a new individual cheetah was added to our database. The lemek wilddog pack continues to be seen by MPCP, and we have added a new group of four females to our database.

The community team deployed 13 camera traps to monitor effectiveness of various bomas types in deterring predator attacks. The team supported the reinforcement of four bomas bomas in Enchorro o sidan and Enkeju enkiorien. The teams also continued to work with the ten lion ambassadors in mitigating human-predators conflict and the wildlife clubs through village visits as detailed in the report.

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RESEARCH UPDATE

Photo © Kasaine Sankan



Intensive monitoring

Photo © Brian Kaelo



On August 1st, we began this year's three months intensive monitoring session. There is still the month on October to go and so we will have full details of the results in our upcoming reports. Here is a brief update on our search efforts and sightings thus far.

In the months of August and September,

our search effort was 5,640Km of driving through the National Reserve and the Mara conservancies, figure 1, and during this period we had a total of 152 lion sightings and 44 cheetah sightings, distributed across the Mara as illustrated in figures 2 and 3.

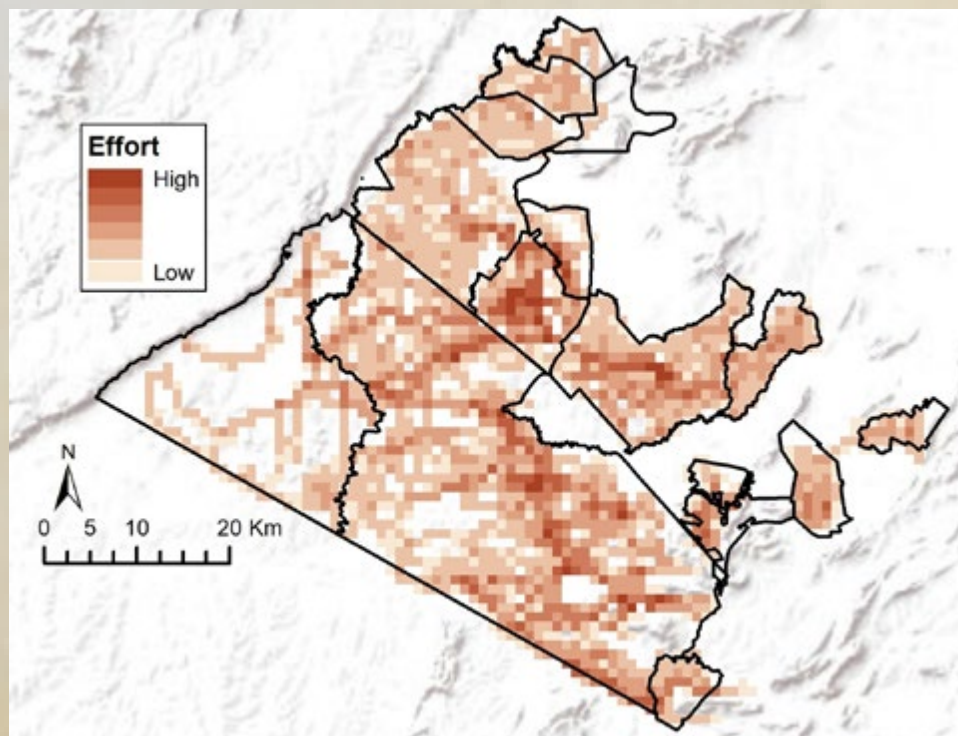


Figure 1: Effort map, coloured according to distance driven per 1x1 km grid cell.

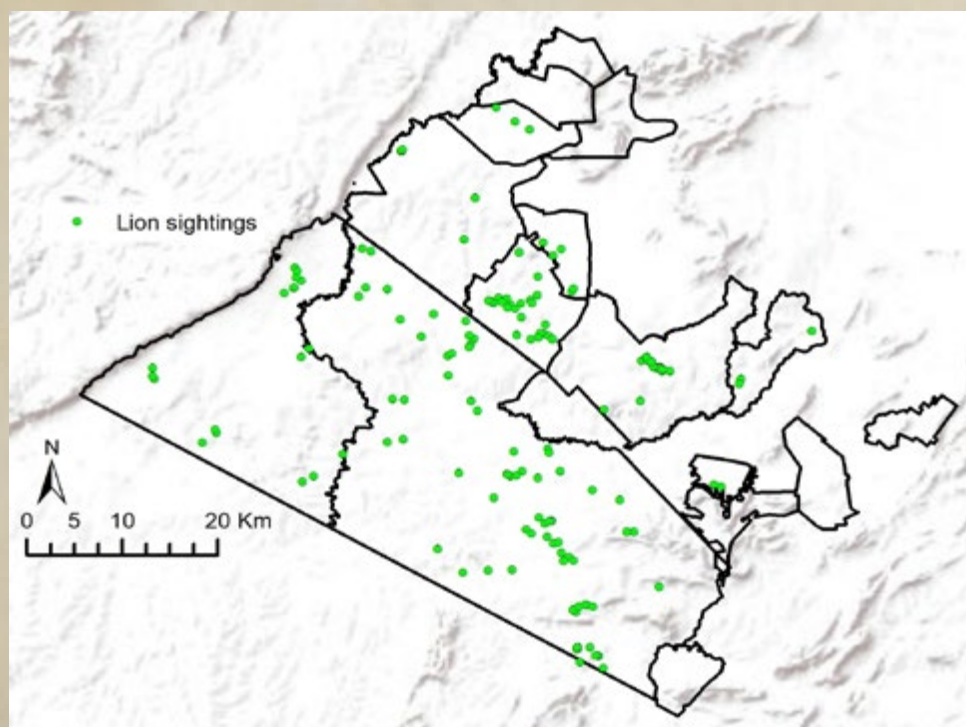


Figure 2. Lions sightings and their distribution. This map should be viewed in light of the effort map.

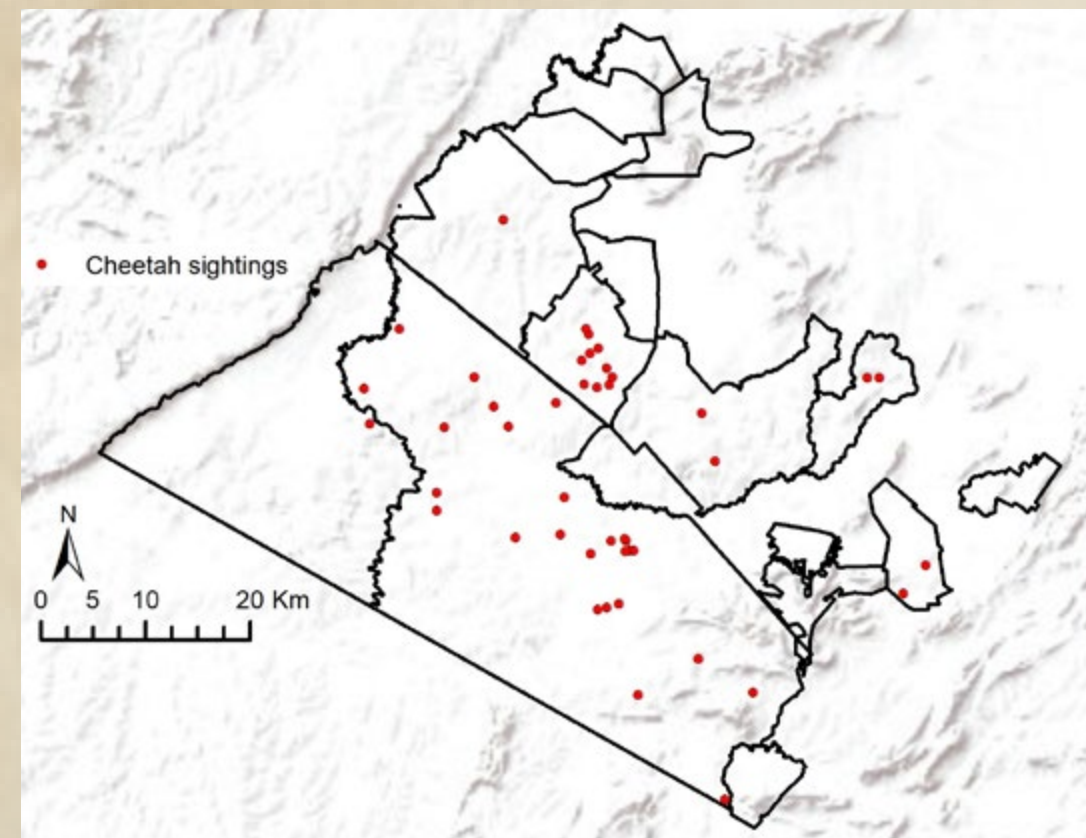


Figure 3. Cheetah sightings and their distribution. This map should be viewed in light of the effort map.

Compared to the same period in 2019, we had roughly the same effort but with fewer lion and cheetah sightings. One reason for this could be a drop in tourism and hence vehicles driving around, due to COVID-19. This means that there are fewer eyes on the ground helping our team to spot the predators. In our annual report, after completing the intensive monitoring period, we will conduct a correlation analysis to see if there is in fact a link between vehicle abundance and lion and cheetah sightings.

Lion updates

Lion collaring

We deployed three more lion collars during this quarter, and so we now have five lions, including four adult females and one sub-adult male, collared.

Adult female from the Lemuny pride

The first collar deployed this quarter was on an adult female from the Lemuny pride in Olkinyei Conservancy. The two females of the Lemuny pride are former Enesikiria lions from Naboisho Conservancy, who broke away and settled in Ol Kinyei Conservancy where there was a vacant area. They utilise the north-eastern

part of Ol Kinyei Conservancy. The previous pride that used this area as their territory have all disappeared, and we highly suspect that they have all fallen victim to human-wildlife conflicts, hence the importance of collaring one of the two pride members.



Figure 4. Naramat being immobilised for collar deployment.

The movements already illustrate how the lion moves onto the community land, figure 5A, and a small part of her preferred ranging area is just on the border of the conservancy, figure 5B.

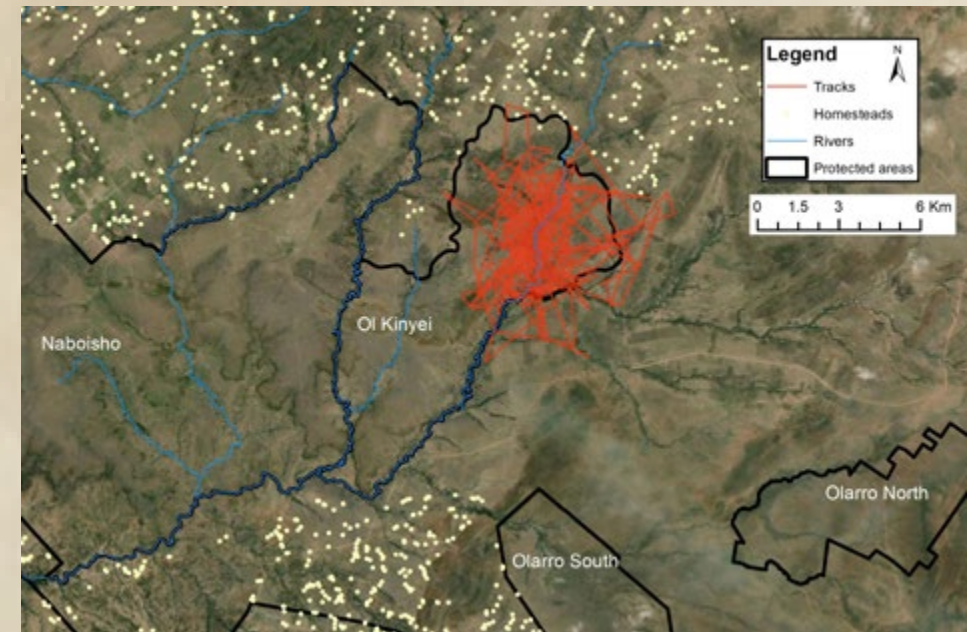


Figure 5A: Movements of the adult female as shown by her actual tracks in red. NB: We currently do not have homestead data on the eastern part of Ol Kinyei Conservancy.

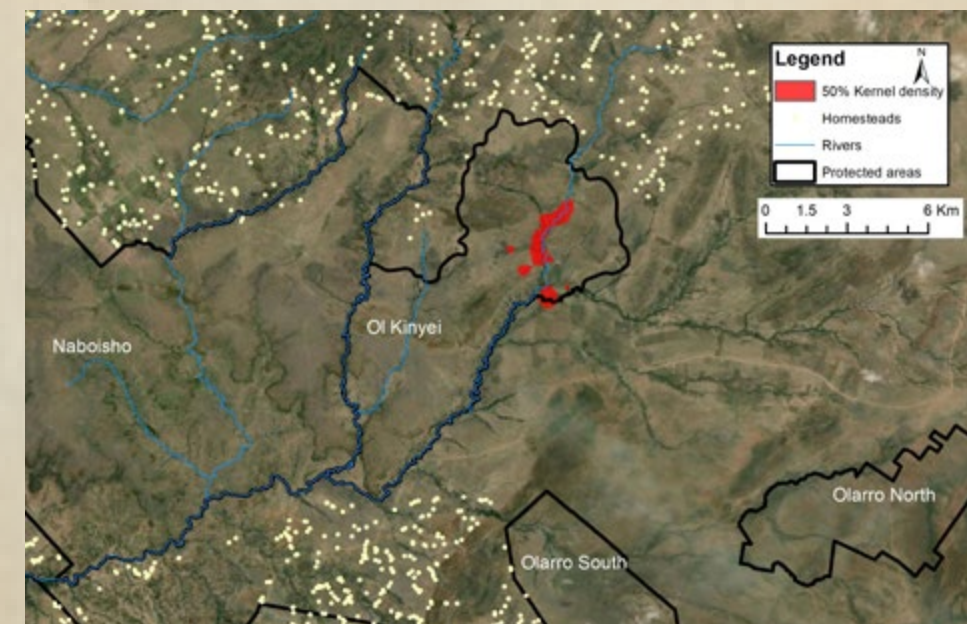


Figure 5B: The red shapes show where the lion has spent 50% of her time.

Adult female from the Olooloimatia pride

This pride consists of nine adult females and 17 cubs of different age sets. The three Topi pride born males Mandevu, Chungwa and Droopy currently control the pride. The Olooloimatia pride ranges in the south-eastern part of the National Reserve. During prey scarcity, it is suspected that the pride moves out of the Reserve and onto community land in search of prey. Here, they are likely to encounter

conflicts with the local community, hence the need to collar a pride member. In the period since collar deployment, the pride has not shown much movement, which can be seen in figure 7A. One reason for this is that during the third quarter, there was still sufficient prey within their core area, mostly due to the Mara-Serengeti wildebeest migration.



Figure 6: The collared Olooloimatia pride female

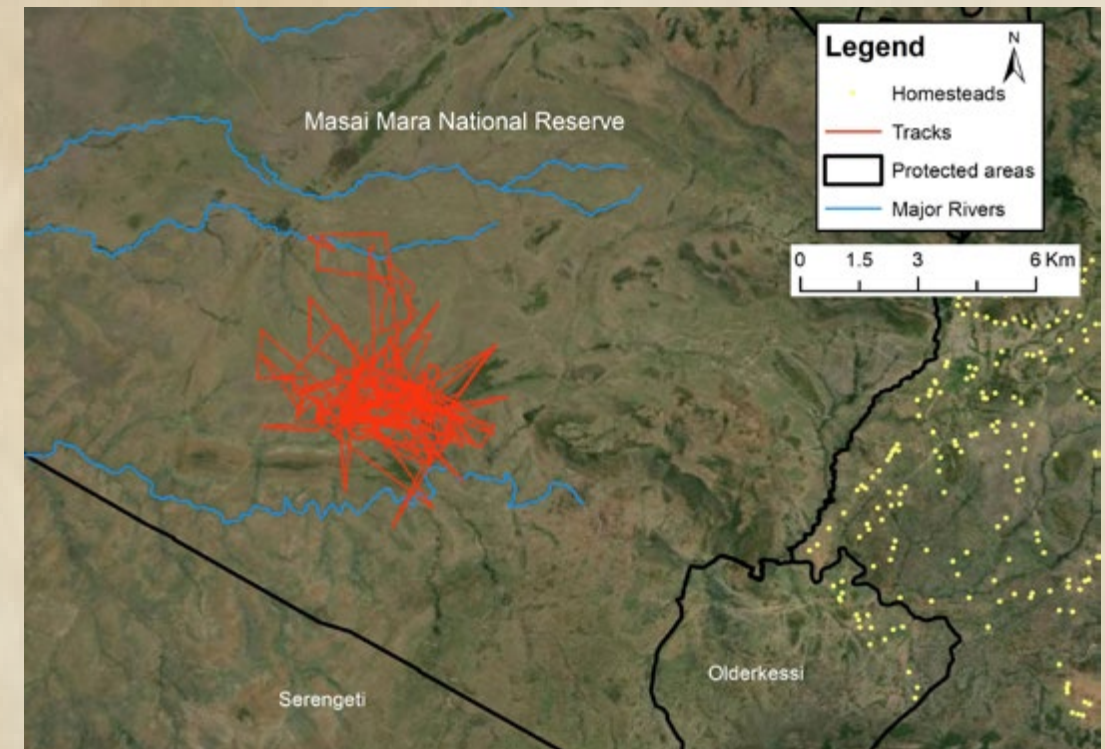


Figure 7A: Movements of the adult female as shown by her actual tracks in red. The collared lioness and her pride still have a small ranging area

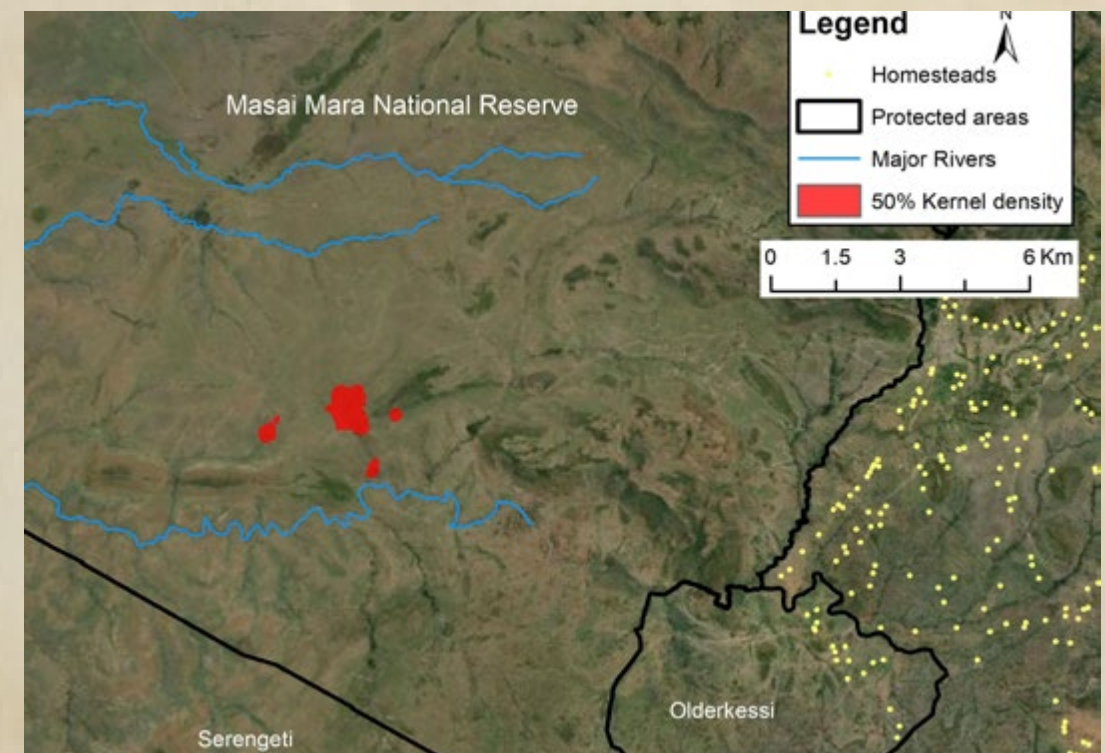


Figure 7B: The red shapes show where the lion has spent 50% of her time.

Adult female from the Olololo/Angama pride

Four adult females make up the core of the Olololo pride. The pride has been through some tough times, losing many pride members due to human-lion conflict. The pride is known to leave the Mara Triangle and venture up the Olololo escarpment onto the community lands and some pride members are never seen again after they leave the protected area. . It is very likely that these individuals have circumbed due to the mentioned conflicts. We only have five weeks worth of data and so far, the collared female, who has been named Mama Kali, has been using most of the northern tip of the Mara Triangle, staying within the protected area boundaries, as shown in figure 9A. It will be interesting to see how she and her pride will move after the next rainy season sets in and the prey disperse.



Figure 8. Mama Kali from the Olololo pride

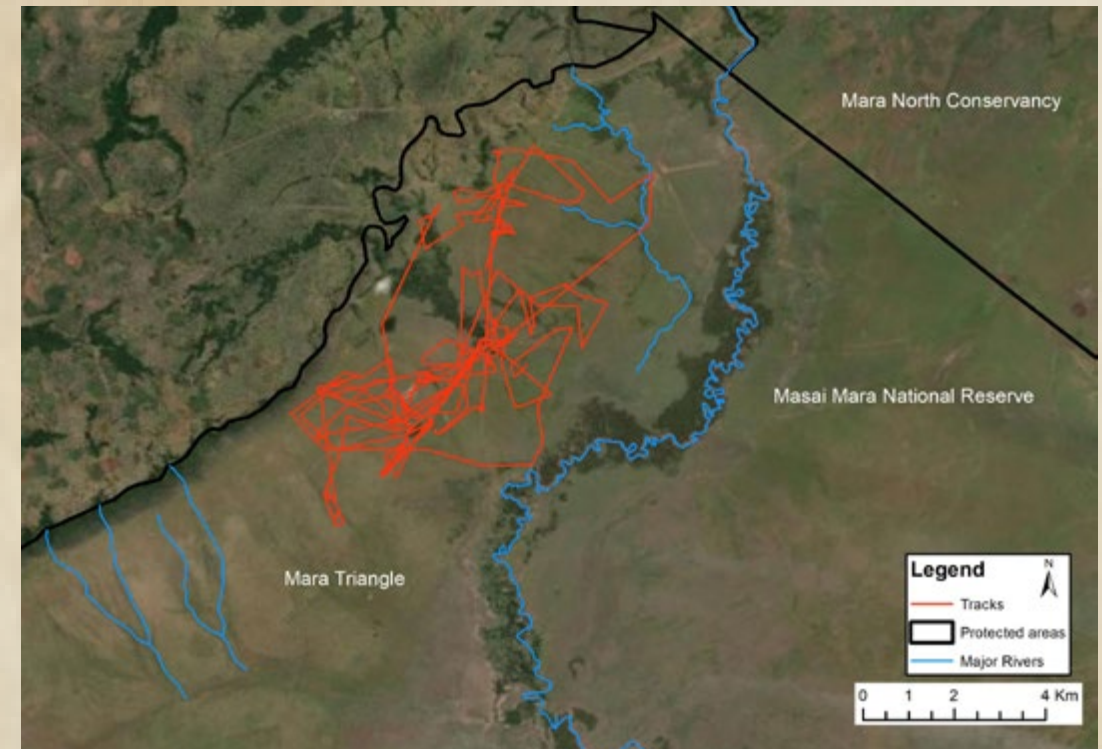


Figure 9A: Movements of the adult female as shown by her actual tracks in red.

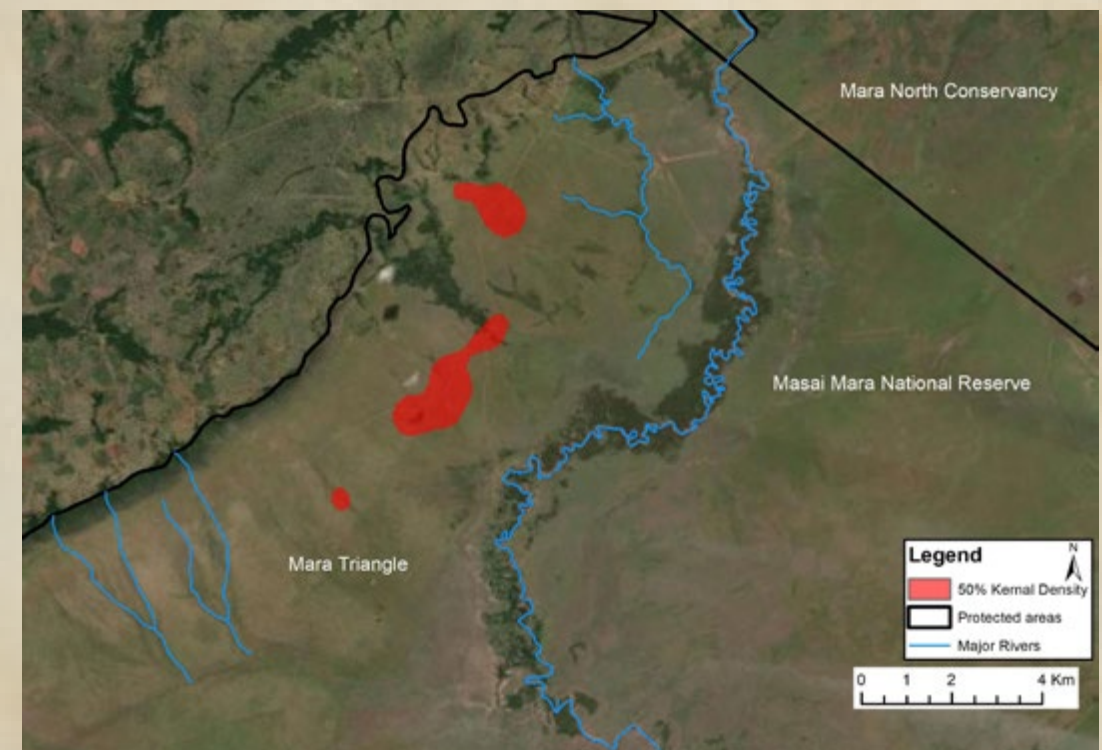
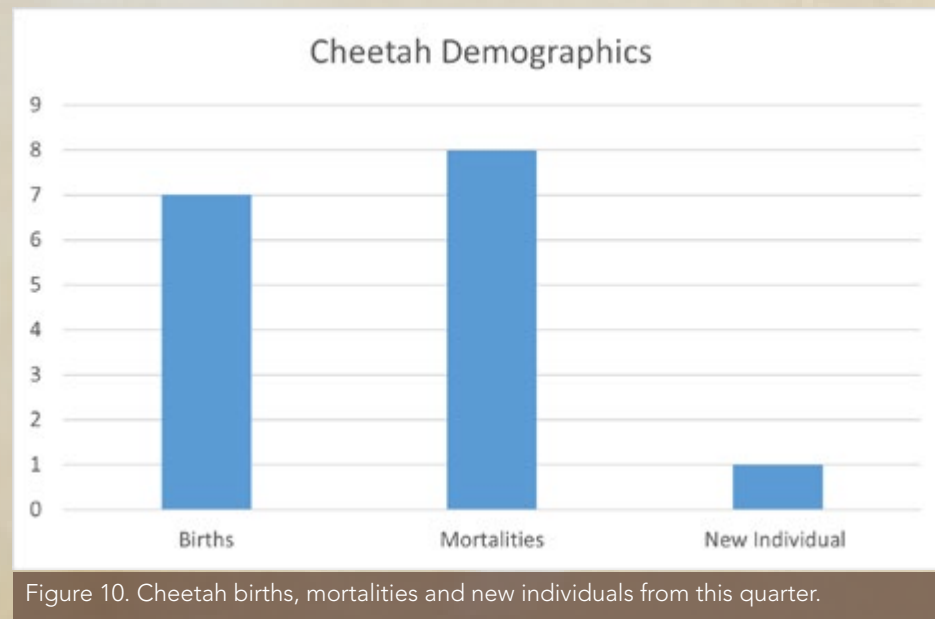


Figure 9B: The red shapes show where the lion has spent 50% of her time.

Cheetah Updates

This quarter we have recorded new information on cheetah demographics as displayed in figure 10.



Births:

Kweli gave birth to two cubs in Olare Motorogi Conservancy while Rosetta gave birth to five cubs in the National Reserve



Figure 11. Kweli with her 2 cubs in OMC

New Individual:

A new young male appeared in the Mara Triangle and later in the Musiara area of the Reserve



Figure 12. New male

Cub Mortalities:

The eight cub mortalities we recorded were from three different female cheetahs. Kiraposhe lost two out of her litter of six, Kweli lost one of her two cubs, most likely to hyenas in the National Reserve and Rosetta lost her entire litter of five cubs in the National Reserve

Interesting observations

A son of Naserian from her 2017 litter in the Mara Triangle has reappeared. During our last sighting of him he was still with his mother and brother in 2018. We found him alone in Olare Motorogi Conservancy this quarter. Three out of the six cubs that Kisaru gave birth to last year towards the end of July suddenly separated from Kisaru and the remaining three cubs. Not only is it unusual for cheetahs to disperse when they are only one year old, but also that only some of the siblings separate while others remain. It is possible that the group of seven experienced a severe disturbance, caused by either wildlife or humans, to such an extent that the individuals were not able to rejoin after the separation event. The three cubs, all female, have remained out of sight since their departure. Kisaru's three cubs that stayed with their mother, dispersed towards the end of this quarter, and were last seen at the tip of Mara North Conservancy.

Wild dog Updates

Sightings

The Lemek pack continues to be seen by MPCP, rangers and community members. There has been nine sightings of this pack during this quarter in the tip of Mara North Conservancy and Paradamat Conservation Area, Figure 13. From the information gathered through these sightings and from our camera traps, we can conclude that the pack has lost another juvenile and so the pack now consists of four adults and seven sub-adults. We have had one sighting of a new group of four females in Enonkishu Conservancy. We believe that this is the same group that came through the Mara Triangle in July. We do not know their origin but it is likely that they have dispersed from either a Serengeti pack or a potential pack in Olosukut Conservancy.

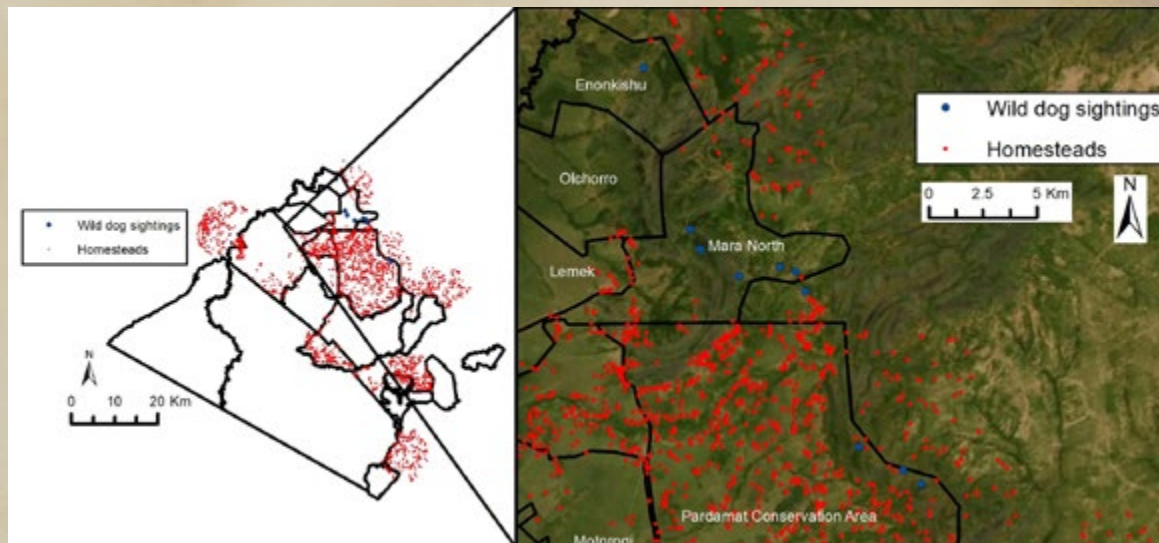


Figure 13. This map shows our wild dog sightings overlaid with homesteads.

Conflicts

Human predator conflicts increased in the areas utilised by the Lemek-Paradamat pack. The conflicts were caused by lions, cheetahs, wild dogs and hyenas. Predators continue to kill livestock and they target especially homesteads with poor husbandry and herding practices. Figure 14 displays the conflicts caused by predators during the reporting period.

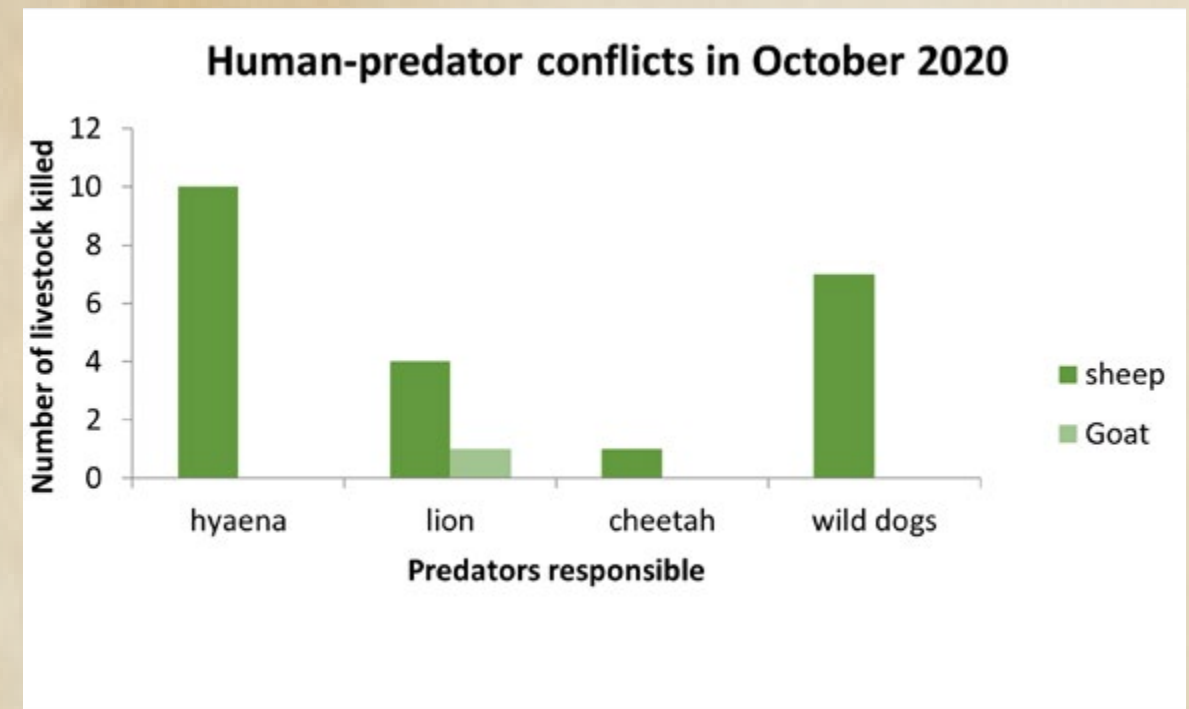


Figure 14: Number of livestock killed by predators during the reporting period.



Figure 15: A Photo of a sheep killed by wild dogs in Paradamat hills.

COMMUNITY UPDATE



Human wildlife conflict mitigation

Human predator conflict still stands out as a major challenge to livestock-keepers bordering conservation areas in the Mara. The negative interaction begins when predators prey on livestock (inside or outside bomas) leading to huge livestock losses. This can result in retaliatory killing of predators depending especially where large numbers of livestock are killed. To prevent such incidents, MPCP works closely with communities through designing and implementation of human wildlife conflict mitigation measures. This quarter MPCP managed to implement the following mitigation efforts;

Deployment of camera traps on bomas

In attempts to better understand which predators visit bomas at night causing conflicts MPCP has now installed 13 Camera traps in bomas across the Mara ecosystem (see Figure 20) The Cameras were installed in 10 recycled plastic poles bomas (Oloisukut, Siana, Emarti, and Ngila) and 3 bomas made of branches (Rekero and Olkurroto). These cameras will allow us to recommend predator specific



Figure 16: MPCP's community outreach officer deploying a camera trap in one of Recycle plastic poles bomas in Siana assisted by the boma owner

conflict mitigation measures as well as understand the effectiveness of the different boma types at deterring predator attacks. One of the recycled plastic bomas in Meguarra (Figure 16) that was installed with a camera trap was visited by a hyenas at night (Figure 17) but could not gain access due to its sturdiness.



Figure 17: A hyena approaching a recycled plastic poles boma at Meguarra area closer to Siana conservancy (Photo captured by Camera trap)

Boma reinforcement

During this period, MPCP recorded a high number of conflicts that were associated with poorly built bomas in Enchorro o sidan, Enkeju enkoirien and Rekero areas. MPCP responded to four major conflicts that happened in Enkeju enkoirien (Figure 18) and Enchorro o osidan that were reported by MPCP's Lion ambassadors and supported the boma owners by giving them triple twist chain links (Figure 19) to reinforce the bomas and avoid future attacks. Figure 20 shows the locations of the reinforced bomas and the locations of bomas installed with camera traps as discussed above.



Figure 18: A community member from Enkeju enkoirien lost 15 sheep when a lion attacked his boma at night. (Photo credit: Philemon Mpooya)



Figure 19: MPCP's community and public relations manager visited the boma owner in Enkeju Enkoirien and delivered triple twist chain links and encouraged him to reinforce the boma.

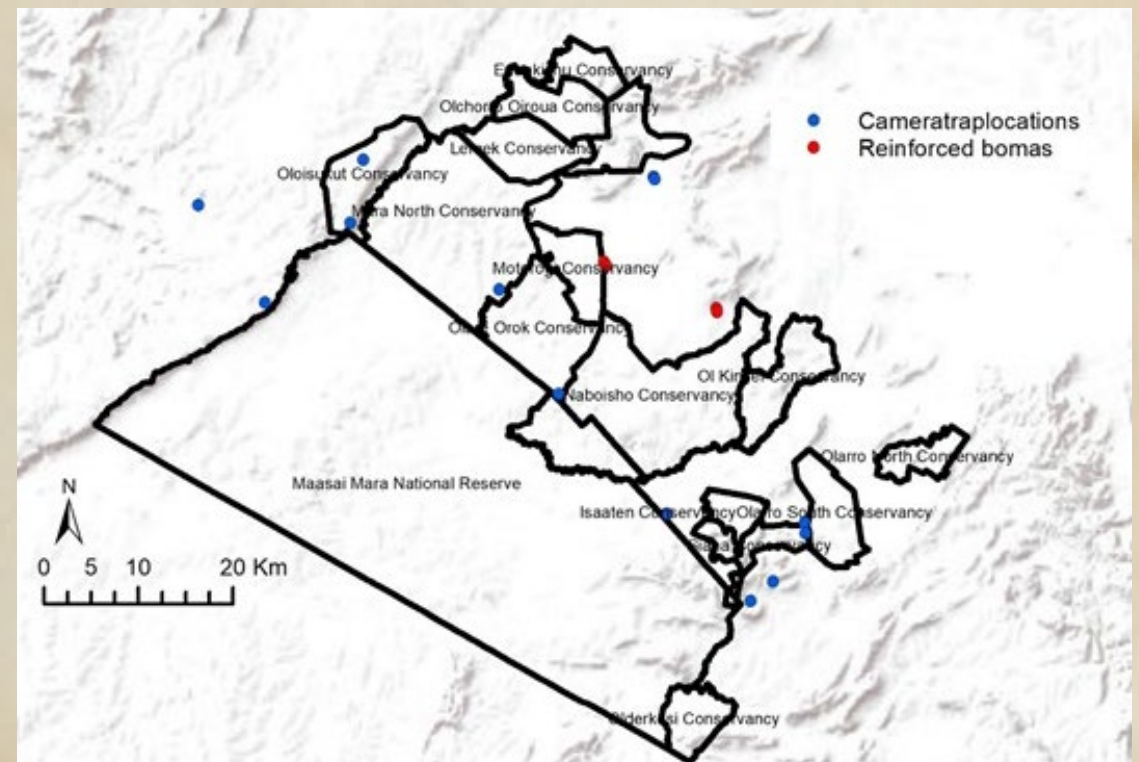


Figure 20: Camera trap locations and reinforced bomas in the Mara ecosystem

Lion ambassadors updates

MPCP’s Lion ambassador programme was initiated to increase lion conservation footprint outside Protected Areas (PAs) through regular engagements with stakeholders and implementation of human-lion conflict mitigation strategies. The ten ambassadors work in each of the zones (Figure 21) and collect data during their field patrols which will enable MPCP to come up with recommendations to support coexistence efforts.

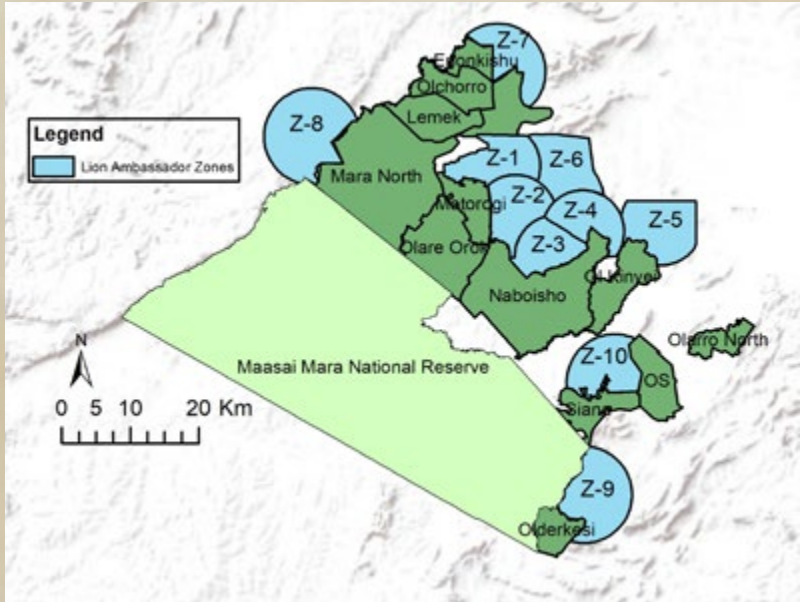


Figure 21: Map of lion ambassadors zones in the Mara

i) Settlement maps

The ambassadors have been mapping settlements (Figure 22) to enable us to understand areas where wildlife corridors still exist and better explain human-wildlife interaction in the landscape. A total of 4,627 settlements have so far been recorded with variation in numbers between the zones.

ii) Conflicts records

During this period, the ambassadors recorded 184 conflict incidents within the zones and a variation in conflict occurrences between the zones can be seen in figure 23 below. These differences were related to vegetation cover and livestock husbandry in the zones. During this period (June-Aug), a total of 551 livestock were killed and 116 injured.

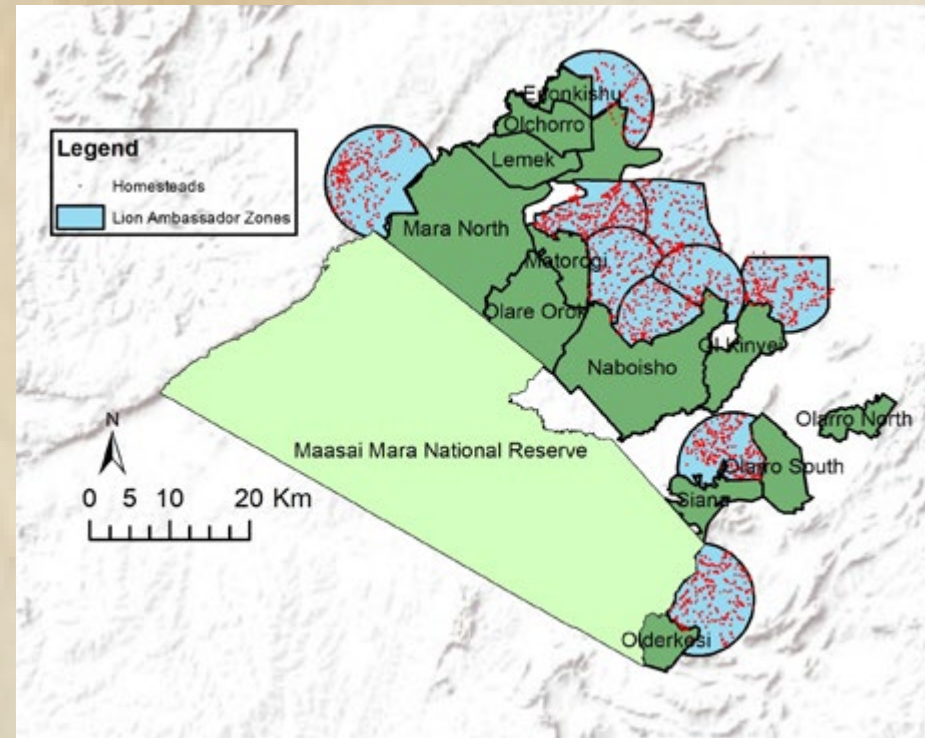


Figure 22 : Settlements distribution within in the 10 zones

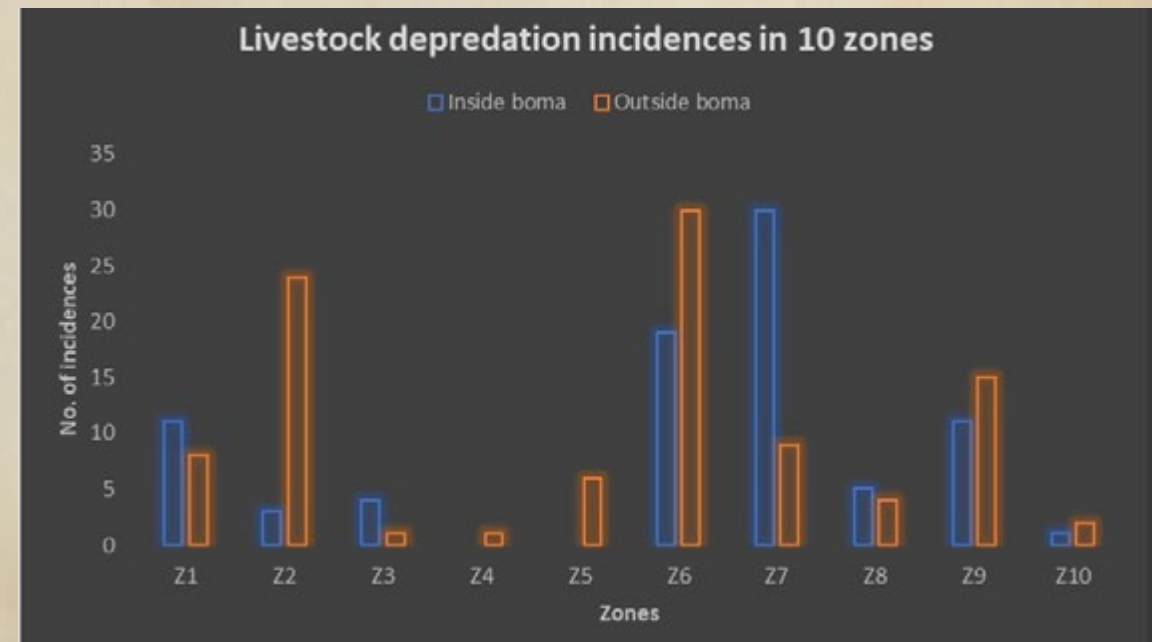


Figure 23 : Livestock depredation in the 10 zones

Wildlife Clubs activities

During this reporting period, the schools were still closed due to COVID-19 outbreak. MPCP's community team continued to engage Wildlife club members through village and home visits. Two villages (Kolong in Talek and Olkimitare in Aitong) and three homesteads were visited during this period where 100 members were reached. The activities carried out are described in details below.

a) Artwork and conservation talks

During the village and home visits, MPCP delivered reading and artwork material to wildlife club members to encourage them to read and learn more about conservation during the school break. In Kolong and Olkimitare villages, the team engaged 30 children in conservation talks on key emerging issues e.g. COVID 19 and how it has affected conservation.

During the visits, the team issued reading materials to the members (Figure 24). The members were also engaged in an art competition geared at enhancing their talents. Selected artwork on Wild dogs was also used on social media during this year's World Wild dogs' day on 26th August to create awareness on Wild dogs.



Fig 24: Wildlife clubs members display reading materials during a village visit for a conservation talk in Kolong village around Talek

b) Tree planting

MPCP's Community outreach officer (Dominic Sakat) led Wildlife club children and parents from Kolong village in Talek in a celebration to mark this year's World Nature Conservation Day (28th July) through a tree planting exercise (Figure 25). Twenty saplings were donated by Base Camp Explorer Foundation (BCEF)

in efforts to encourage communities to plant trees and increase forest cover in the country. The exercise provided a platform for engaging parents in practical conservation which made them appreciate the work done by the club members.



Figure 25: A tree planting exercise in Kolong village to mark the World Nature Conservation Day on 28th July



Mara Predator Conservation Programme

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