

MARA CHEETAH PROJECT



KENYA WILDLIFE TRUST

Quarterly Report

1 April 2015 – 30 June 2015

Contents:

- 🐾 General update
- 🐾 Monitoring
- 🐾 Research
- 🐾 Community projects
- 🐾 Training
- 🐾 Meetings and conferences
- 🐾 Team members
- 🐾 Tony Lapham Predator Hub
- 🐾 Visitors
- 🐾 Publications
- 🐾 Future plans
- 🐾 Acknowledgements

This report was compiled by Femke Broekhuis (Project Director) and Michael Kaelo (Chief Community Officer)

General update

This quarter we saw the start of the rainy season bringing some much needed rain to the Maasai Mara. The Mara is looking very green at the moment just in time for the arrival of the wildebeest migration. The heavy rains have made the fieldwork quite challenging this year, especially the long grass which limits visibility and the mud resulting in team members getting rather stuck. We have been fortunate enough that the likes of Naboisho Camp and Salas Camp helped us out in these sticky situations.

This quarter we have also seen some exciting new developments on the research side, including the collaring of the first ever cheetah in the Mara and the start of the genetics project together with Kenya Wildlife Service and Smithsonian Institute.

Monitoring

Weather data

So far this year we have had some good rains. In total the rainfall at the Tony Lapham Predator Hub has been 619 mm (Figure 1).

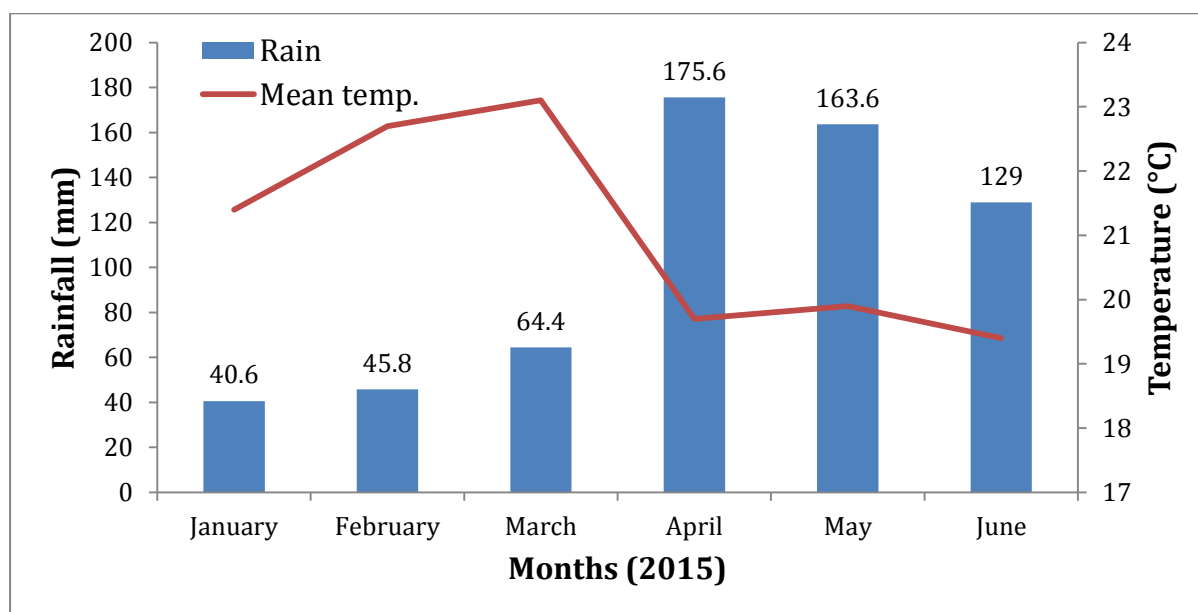


Figure 1: Rainfall and temperature data ranging from the beginning of January through to the end of June 2015. These data are collected by a weather station based at the Tony Lapham Predator Hub and are readily available on www.maracheetahs.org.

General Monitoring

In this quarter we spent 807 hours in the field and covered a distance of 9,956 km (on average 109km/day). During this time we recorded 973 carnivore sightings including 70 sightings of cheetahs and a few sightings of rare and/or elusive species such as aardwolf and caracal (Figure 2).

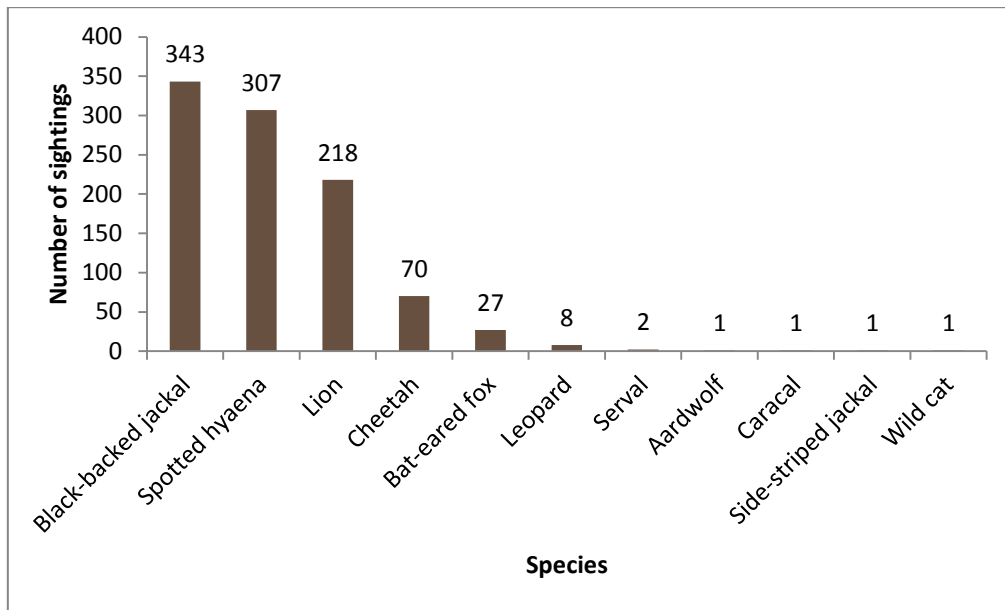


Figure 2: Number of predator sightings recorded from 1st April 2015 – 30 June 2015.

This quarter we have recorded several deaths of predators other than cheetahs. In June the Community Team came across a suspected case of poisoning of hyaenas on the Talek-Aitong road. This incident was immediately reported to David Kimutai at the KWS research station and various other stakeholders in the area.

We have also recorded several deaths caused by collisions with vehicles, including a spotted hyaena and a black-backed jackal. This is not the first time that we have noted such incidences as in the past we have recorded vehicle related deaths of bat-eared foxes and aardwolves. These incidences were recorded on the main murrum road both inside and outside the wildlife areas and with the tarring of the Narok-Sekenani road kill is likely to be on the increase. We would like to encourage people to take more care when driving on these roads.

Cheetah monitoring

Of the 70 cheetah sightings we had this quarter, more than half of the sightings were our own (40) and the rest were through reports (19) or the presence of other vehicles (11). In total we sighted 21 different individuals or groups of cheetahs which included 3 sightings of new individuals (2 single females and one coalition of 3 males). While we come across new individuals every once in a while it was very exciting to find this coalition of three males. We suspect that the males are of 2 different ages (2 older and one younger) but we have no idea where they came from. One of the males is very distinct looking as he was missing half his tail (Figure 3). While it is suspected that a cheetah's tail is essential for successful hunts, the team witnessed this particular individual take down an adult female impala without problem. If anyone sees these (or other) new individuals, please send us an email info@maracheetahs.org.



Figure 3: A new male from a coalition of three that was recently sighted. This particular individual was missing half his tail.

In addition to sighting new adult cheetahs we also recorded three new litters, one in Naboisho/OI Kinyei area, one in Mara North and one in the Mara Triangle. The female in Naboisho/OI Kinyei has currently got three cubs. We have known this female since she herself was a cub and believe that this is her first litter. A female also gave birth in Mara North Conservancy but soon after they left the lair and started following their mother around they all died. The day that they disappeared there were a lot of hyaenas around. There is a general concern amongst tourism partners that the high numbers of hyaenas in certain areas are having a significant impact on the cheetah population. Whilst spotted hyaenas are known to kill cheetah cubs, our data do not suggest that areas such as Mara North have higher numbers of hyaenas compared to other areas in the Mara.

This quarter we also recorded the death of a female cheetah known as Narasha. Born at the end of 2003/beginning of 2004, she was well over 11 years. Reports suggest that she was killed by sub-adult lions from the Marsh Pride while she was on a kill near Musiara in the Maasai Mara National Reserve.

Research

Satellite collars

The Mara Cheetah Project has been given permission by Kenya Wildlife Service, Narok County Government and the Maasai Mara Wildlife Conservancies Association to deploy five satellite collars on cheetahs in the Maasai Mara National Reserve and the surrounding conservancies. On 11th April 2015 the Mara Cheetah Project, with the help of the Kenya Wildlife Services (KWS) veterinary team, deployed a satellite collar on Noosura, a female cheetah who at the time had four cubs. Noosura was chosen because, based on sightings, we believe that she spends a significant amount of time outside the wildlife areas where she is likely to be encountering human settlements and livestock. Despite this she has so far managed to raise 4 cubs to the age of 15 months which is no small feat for a cheetah.



The satellite collar deployed on Noosura is giving us a unique insight into the life of a cheetah in the Mara. The collar allows us to track the cheetah even during times of day or in areas when and where it would be difficult to find or follow her. Since the deployment of the collar the MCP team have tracked Noosura on several occasions—on some of these occasions we were not able to get a visual of her and the cubs as they were hidden in very dense vegetation. This, in some ways, contradicts the idea that cheetahs only use open plains. After being collared in Ol Kinyei Conservancy, Noosura did a loop around Naboisho Conservancy before returning to Ol Kinyei where she spent a week on the Eastern border before heading further East into community land, into Olarro conservancy and back to Ol Kinyei (Figure 4).

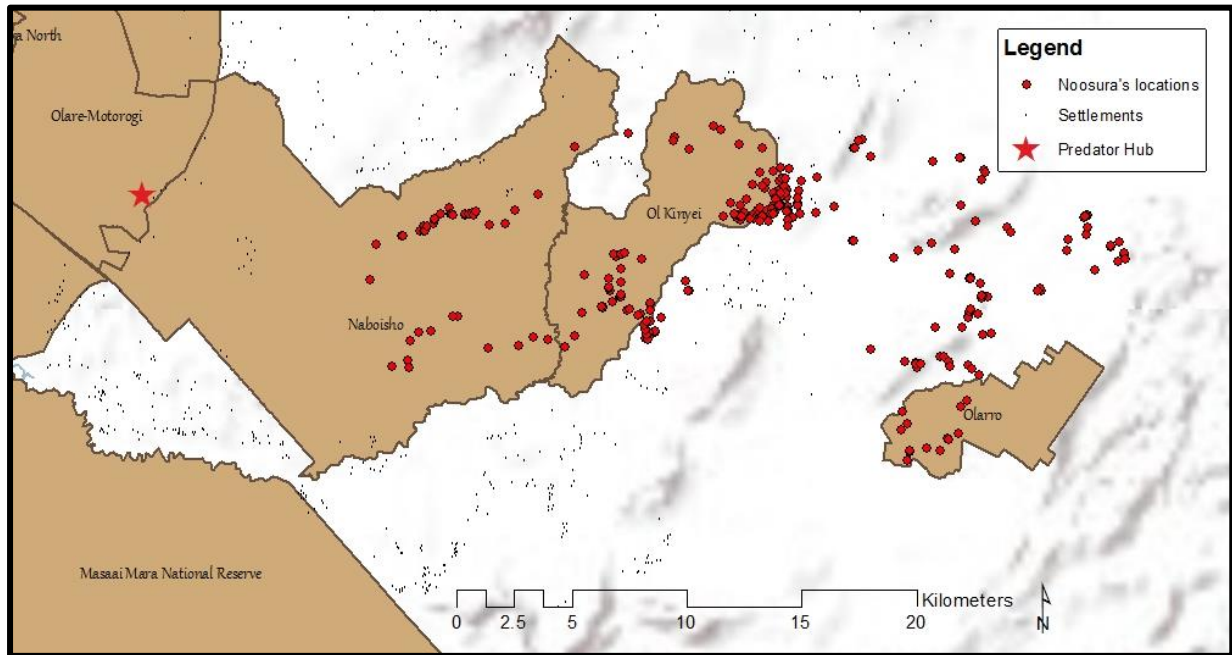


Figure 4: Noosura’s location (red dots) since her collar was deployed in April 2015

Rather unfortunately the collar stopped collecting data in June and we are trying our best to replace the collar as soon as possible. If you see Noosura then please contact us (phone number: 0701 158737). We are still waiting to deploy the remaining four collars. As we have particular individuals in mind, deployment will depend on when these individuals are sighted.

First and foremost we would like to thank Ginny and Dick for donating this collar and for the Banovich “Wildscapes” Foundation for making this all come together. We would also like to thank the Ol Kinyei Conservancy and Olarro Conservancy for their support and enthusiasm in the project. Lastly we would like to thank the KWS veterinary team for their great work during the collaring operation.

Lab-based research

With funding provided by the BAND foundation we have embarked on the first stages of the genetics work. We have started with the purchasing of some essential lab equipment, both for the Tony Lapham Predator Hub and for the laboratory at the Kenya Wildlife Service Headquarters in Nairobi. This equipment should be in place by next month for analyses to commence of the first samples. The first stage in the analyses is to test the DNA extraction process. As faecal samples are the easiest type of DNA sample to collect for cheetahs, these will be collected and analysed first.

Community projects

Wildlife Clubs of Kenya

In collaboration with Wildlife Clubs of Kenya (WCK) in Nairobi, we have recruited five schools in Aitong and Talek area to start Wildlife Clubs in the Mara ecosystem. The five schools include ADCAM Academy and St. John Paul Academy in Aitong and Irbaan Primary, Loigero Primary and Mara Hills Academy in Talek area. The total number of club members for the five schools are about 150 children from class 4 to 8. With funding provided by the BaseCamp Foundation we have paid the registration fees for the schools and membership fees for the members for this year. In the future we will help set up activities that will generate funds to enable the schools and pupils to renew their membership on an annual basis.

Human-wildlife conflict cases

This quarter we have seen several depredation and retaliation cases in predators in the Mara, none involving cheetahs. The biggest conflict event this quarter was reported to us on 15th June by one of the interviewers working on the questionnaire survey. He informed us that a hyaena got into a boma in Oololaimutia and killed 200 sheep while injuring 10 (Figure 5). Michael Kaelo (Chief Community Officer) and Dominic Sakat (Community Liaison Officer) went to investigate, informing KWS and County Council officials on the way. The community team went to speak to the villagers who were ready to retaliate and calmed them down. KWS also came to talk to them and promised compensation.



Figure 5: Approximately 200 sheep were recently killed by spotted hyaenas at Empoo village in the Oololaimutia area (Photo credit: Michael Kaelo)

Human-wildlife conflict questionnaire

In an effort to better understand and respond to human predator conflicts, we designed a questionnaire to help gather information on various topics that relate to human wildlife conflicts. These topics include, but are not limited to, livestock depredation, husbandry practices, wildlife trends, solutions to human wildlife conflicts and retaliation. The aim of this survey is to better understand human-wildlife conflict in the Mara ecosystem (conflict hotspot map) and to find solutions that might have worked in various places to help us in address human predator conflicts. So far 400 interviews have been conducted and we have 420 more to go.

Training

For the questionnaire survey, we trained 10 interviewers from around the Mara on how to conduct the interviews and how to use a GPS to find the *manyattas* (settlements) that were randomly selected. In addition we provided them with the necessary equipment to collect data. Funding for the field equipment and for the training was kindly provided by the BaseCamp Foundation (Figure 6).



Figure 6: Interviewers pose with research equipment (funded by BaseCamp Foundation) during the training at the Tony Lapham Predator Hub (Photo credit: Femke Broekhuis)

This quarter we have also been working with the team on how to deploy collars on animals incl. safety precautions that need to be taken to ensure that both the animal and the people are safe. This is also the first time that some of our team members have worked with collars so we trained them on how to use the tracking equipment to find a collared individual.

Meetings and conferences

On the 26th May, the Kenya Wildlife Trust held a Symposium at the African Wildlife Foundation (AWF) headquarters. The aim of the symposium was to bring together all the projects that are either fully or partially funded by the Kenya Wildlife Trust to present some of the successes and the challenges that they face.



Figure 7: The attendees of this year's KWT Symposium (Photo credit: Fiona Tande)

The projects that were present were the Mara Cheetah Project, Mara Lion Project, Mara Hyena Project, Ewaso Lions, Kenya Rangelands Wild Dog and Cheetah Project and Lion Guardians. In addition, KWS was present to give insight into the permitting process to collect and export samples and there were several interested guests including Jonathan Scott (presenter and photographer), Clea Earnshaw (Asilia Positive Impact), Chania Frost (Cheli & Peacock Community Trust) and Beatrice Karanja, Fiesta Warinwa and Philip Muruthi from AWF (Figure 7). Besides the day being extremely informative, it was also a great opportunity to catch up with fellow colleagues.

Team members



Fiona Tande

This quarter Fiona Tande joined the Mara Cheetah Project for a 4-month internship (Figure 8). Fiona is a Maasai from Ngong, Kajiado and holds a Bachelor of Arts degree in Community Development from Daystar University. During her internship she will be helping create cheetah profiles for the cheetah identification software that is being developed by the University of Surrey. In addition, she is helping set up Wildlife Clubs of Kenya, together with the Community Team, in various schools around the Mara and will be entering the data from the questionnaire survey.

Figure 8: Fiona Tande recently joined MCP as an intern.

Looking for a Senior Research Assistant

We are currently looking for a Kenyan Senior Research Assistant to join the Mara Cheetah Project to help out with some of the genetics and disease work. More information about the position is available on our website: www.maracheetahs.org/vacancies

Tony Lapham Predator Hub

The upgrade of the Tony Lapham Predator Hub staff housing is coming along nicely (Figure 9). We were originally hoping that it would be completed in April, but due to heavy rains this quarter the building has been delayed. The staff housing is almost complete, including a solar system for power and a rain water collection system and we are hoping everyone can move in at the beginning of July.



Figure 9: The upgrade of the Tony Lapham Predator Hub staff housing is almost complete! The photo on the left was taken at the end of March and the photo on the right was taken at the end of June.

Visitors

Smithsonian Institute

Drs. Suzan Murray and Warren Johnson from Smithsonian Institute came to Kenya in May for various meetings with the Mara Cheetah and Lion Projects and KWS. Through this tripartite partnership we will first embark on the cheetah and lion genetics research for which we recently received funding from the BAND foundation (see last report).

Stuart Butler – Walking with the Maasai

In June we had the pleasure of hosting Stuart Butler for a day. Stuart is working on a project called “Walking with the Maasai” where he walked through the Mara (from Loita’s to Mara North) speaking to different people about the Mara Ecosystem and the roles they play within that. Stuart



spent the morning interviewing Femke Broekhuis whilst looking for cheetahs and in the afternoon he had an interesting discussion with Michael, Dominic and Francis from the community team about human-wildlife conflict in the Mara.

Figure 10: Stuart Butler (center) visited the Tony Lapham Predator Hub to find out more about cheetah conservation in the Mara. – pictured here with Michael, Francis and Dominic from the Community Team and Nic from the Mara Lion project (from left to right).

Publications

This quarter we have published articles both in peer-reviewed journals and in various magazines. The article published in the peer-reviewed Journal of Applied Ecology discusses the impacts of fencing in dryland ecosystems. This article has recently received quite a bit of media attention, including an article by Mongabay. The other two articles about the Mara Cheetah Project were published in KOMBA, the children's wildlife magazine produced by Wildlife Clubs of Kenya, and Ndege, AirKenya's inflight magazine. For more information on these articles please see the references below:

Developing fencing policies for dryland ecosystems. Journal of Applied Ecology (2015).

Authors: Durant, S. M., Becker, M. S., Creel, S., Bashir, S., Dickman, A. J., Beudels-Jamar, R. C., Lichtenfeld, L., Hilborn, R., Wall, J., Wittemyer, G., Badamjav, L., Blake, S., Boitani, L., Breitenmoser, C., **Broekhuis, F.**, Christianson, D., Cozzi, G., Davenport, T. R. B., Deutsch, J., Devillers, P., Dollar, L., Dolrenry, S., Douglas-Hamilton, I., Dröge, E., FitzHerbert, E., Foley, C., Hazzah, L., Hopcraft, J. G. C., Ikanda, D., Jacobson, A., Joubert, D., Kelly, M. J., Milanzi, J., Mitchell, N., M'Soka, J., Msuha, M., Mweetwa, T., Nyahongo, J., Rosenblatt, E., Schuette, P., Sillero-Zubiri, C., Sinclair, A. R. E., Stanley Price, M. R., Zimmermann, A., and Pettorelli, N. 2015.

Checking on Cheetah. Komba magazine (2015, 1). Author: Femke Broekhuis

Mara Cheetah Project. Ndege magazine June-August 2015

<http://www.ndegenews.com/2015/06/mara-cheetah-project/>. Author: Femke Broekhuis

Future plans

In the next quarter we are planning to:

- Complete data collection human-wildlife conflict questionnaire (420 interviews)
- Complete entering data from the human-wildlife conflict questionnaire survey
- Complete cheetah catalogues for the cheetah identification software
- Continue collecting samples for genetic and hormone analyses
- Project Director, Femke Broekhuis, will spend some time at the Wildlife Conservation Research Unit (WildCRU) at the University of Oxford
- Chief Community Officer, Michael Kaelo will attend this year's KWS Carnivore Conference and the ERT Conservation: Africa Capacity conference.
- Chief Liaison Officer, Dominic Sakat, is planning to visit Ewaso Lions to learn more about their Kids Camps.

Thank you!

We would like to thank everyone who has supported us in this project and we hope your support will continue into the foreseeable future. We have been truly touched by your enthusiasm and passion.

Funding

We are grateful for all of you have thus far given financial support to the project. This quarter we would like to give a special thank you to the Banovich “Wildscapes” Foundation for donating 5 cheetah collars and for providing the funding needed to deploy these collars. We would also like to thanks Base Camp Foundation for financially supporting our community work.

Data and photos

We would like to thank the guides and managers of Kicheche Bush Camp and Porini Mara Camp and Justin Heath, Richard Pye for reporting some very valuable sightings this quarter. In addition, we would like to thank the Mara Lion Project for their continued support in the field, numerous guides for reporting cheetah sightings and Rekeru Camp, Naboisho Camp, Mara Bush Houses and Sala’s Camp for their support on the ground.

Logistic support

We would like thank Ol Purkel, the Olare Motorogi Trust, Asilia and Kicheche for their support in running the Tony Lapham Predator Hub and Asilia and Sala’s camp for providing support out in the field. In addition we would like to give a big, big thank you to Naboisho Camp and Sala’s Camp for helping us get out of the mud.

Contact us

Email: info@maracheetahs.org

Website: www.maracheetahs.org

Twitter: www.twitter.com/MaraCheetahs

Facebook: www.facebook.com/MaraCheetahProject

