Protecting elephants to conserve the greater Mara ecosystem
www.maraelephantproject.org

MEP December 2019 Report

Elephants spotted in Lemek Conservancy by MEP rangers. The rains have been persistent.

GENERAL

The rains have continued in earnest this month and this has caused a number of roads accessing the Mara to be washed out. We are starting to see longer strands of grass inside the core areas of the conservancies which is fantastic for the long grass grazers, including elephants. Now the fenced areas are clearly visible from the air as a stark contrast to the overgrazed unfenced areas around them. On the 3rd to the 6th MEP's Director of Research and Conservation Dr. Jake Wall and I attended the 12th Annual Wildlife Research Conference in Arusha, Tanzania. It was very interesting to hear about all of the research projects across the country and we also had a chance to catch up with our partners across the border at Tanzania Wildlife Research Institute (TAWIRI).

Marc and Jake at the conference in Tanzania.

Mara Elephant Project would like to extend our sincerest thanks to Olarro Conservancy for supporting the purchase of five satellite elephants collars this month. We are looking forward to deploying these collars in 2020 and working together with Olarro to protect elephants in this ecosystem. Olarro has been instrumental in mitigating conflict around their conservancy and protecting elephants in the Siana area and it's wonderful to have such a committed partner. On the 10th of January, I had the privilege of visiting the Reteti Elephant Orphanage in Namunyak Conservancy in Northern Kenya. It was an impressive facility and they had a quite a few orphaned elephants as a result of their mother's dying from human-elephant conflict.

One of the keepers feeding a baby elephant at Reteti Elephant Orphanage.

When reflecting on what we have accomplished this year I am honored to say that the organization has come a long way. This year Dr. Jake Wall came on board in January to direct the conservation and research department; we took delivery of the new Karen Blixen Camp Trust helicopter in June; started a second Sheldrick Wildlife Trust team in the Mau Forest; started a new team in the Loita Forest with the support of Lori Price and the Elephant Crisis Fund; purchased two new vehicles; built on our already strong partnerships and made new partners in the Mara, Shimba Hills and Tanzania; collared new elephants in the Rift Valley, Nairobi, Mau, Kerio Valley, Nyakweri Forest, and replaced collars in the Mara. All of this has been made possible by our supporters, our dedicated staff and key partners. Thank you to everyone who made all this possible and I look forward to a an even more effective project for elephant protection in 2020.

SECURITY & ANTI-POACHING

MEP has been focusing on habitat protection during the low conflict season and the Situation Report reflects this. In December, all MEP ranger units were very busy with habitat protection. Overall, in December, MEP rangers confiscated 2,000 illegal posts, 10 pieces of podo, 1,575 pieces of cedar, arrested 12 suspects for illegal logging or charcoaling, destroyed 84 kilns and 81 bags of charcoal and removed three snares. This exemplifies the need for more protection in the Mara so we're happy to report that the 14 new recruits from Loita and the second Sheldrick Wildlife Trust Mau De-Snaring Unit completed their basic tactical training at MEP HQ. Their course was delivered by MEP officers and covered navigation, field craft, radio communications, patrol medic, intel procedures, drill, Kenya wildlife laws, securing a crime scene, and MEP SOPs. The recent training will also result in MEP further developing a more detailed SOP document and training manual for rangers. We will continue to run re-training for all security staff. The recruits all passed their training exercise and they were deployed on the 22nd of December. With the teams in Loita and Mau we are able to cover more area and we can expect an increase in protection of all wildlife and habitats in their new areas of operations.

The new MEP rangers with gear at MEP HQ.

The posts recovered in Loita being destroyed.

One suspect arrested on December 23 when the Sheldrick Wildlife Trust Mau De-Snaring Unit discovered illegal logging and charcoaling.

The Transmara MEP ranger unit destroying a kiln on December 3.

Siana team recovered two snares in Maji Moto area targeting impala and zebra for bushmeat.

Human-Elephant Conflict Report:

There were 10 incidents of human-elephant conflict to report in December. All were mitigated using drums, the ranger vehicle or firecrackers.

Elephants being moved to safety on December 27 by MEP rangers.

MEP rangers responding to human-elephant conflict at night.

Ranger & Vehicle Tracking:

In December, MEP rangers covered a distance of 1,468.9 km on foot, 13,106 km by car and 303 km on motorbike. Naroosura team covered the largest distance on foot this month at 598 km from their patrol in Naroosura and Loita Forest. Distance covered by rangers this

month has increased as compared to previous months, which is reflected in the Situation Report.

HELICOPTER

The one notable operation in December was putting a collar on a lion in Nakuru with Kenya Wildlife Service. The lion was caught in a trap in Eldoret after preying on livestock there. There have not been any lions in Eldoret recorded since the 1950s. No one knows how it got to Eldoret but when it was caught, he was taken to Nakuru National Park where we collared and released him on the 11th.

The lion being transported to safety.

COMMUNICATIONS & FUNDRAISING

December is a keystone fundraising month for Mara Elephant Project and with the late Giving Tuesday, December 3, this year, we really had to capitalize on a short holiday giving season to make the most of everything. Overall, we raised $4,643.60 on Facebook with 33 donors. Our Giving Tuesday Facebook Fundraiser ran for one week and received $4,340 in

donations from 24 people. We also had two additional fundraisers run by Lynda and Tricia, thank you to both. We received $22,281 through 95 individual donations via PayPal and received year-end gifts and other donations totaling $46,181. Thank you to Nicholas Lapham, the JE Fehsenfeld Family Foundation, the Bliss Family Foundation, and an anonymous donor for their very generous donations. We also received grants from the Sidekick Foundation, Angama Foundation, Taronga Conservation Society and Föreningen Försvara Elefanterna. Finally, Mara Elephant Project is pleased to announce a $10,000 grant from Elephant Cooperation that will be applied to a project in 2020. We'd also like to than SAWA for their continued support of MEP. Thank you to all of those mentioned and the many more individuals and organizations that supported us in December and through 2019. In terms of media exposure, MEP's partner Seedballs Kenya was featured on CNN Africa with a cameo by MEP CEO Marc Goss. Dr. Jake Wall was also featured in Trek Magazine and the blog on MEP's collared elephant Hugo was well received.

Hugo photographed at sunset.

RESEARCH

Director's Update:

December was incredibly wet in the Mara and most days we experienced large downpours. We witnessed an increase in elephant numbers near our HQ and have had elephants in and around the MEP HQ for the last several weeks. Below is a summary of the research activities at MEP during December. Unfortunately, we lost Hugo who was our biggest bull. He died on the bank of the Mara River within the Reserve near Musiara swamp – a favourite location of his. We've since recovered his skull to keep as an educational tool at MEP HQ. His molars were very worn indicating an advanced age and therefore the likely explanation is that he died of old-age and malnutrition. Although a tremendous loss, it's nice to think he lived out his days in peace.

Hugo's skull at MEP HQ.

In mid-December we hosted a team from the Mara Triangle at MEP HQ to discuss integration of ranger patrol and operational event data collected by the Mara Triangle into the MEP EarthRanger system. Our vision is to create a common data platform and methods for patrolling consistent across the Mara. We will continue this training and integration in the new year. I worked on several outputs for the Narok County Government Spatial Plan. On Thursday December 19, we organized to meet with KWS, NCG the District Commissioner (Narok), NEMA and the Kenya Forestry Service to discuss the deforestation crisis happening in Nyakweri Forest. We have agreed to follow up with a barasa in January to help inform local forest inhabitants about the laws preventing forest cutting and to subsequently perform joint patrols with MEP, KWS and KFS. Sixty percent of the forest has been cutdown in the last 20 years and is an important elephant range area.

Marc and I attended the TAWIRI annual scientific conference in Arusha. Although we did not present, we were able to network with many scientists from the region and to renew our collaboration with TAWIRI in protecting elephants in Northern Tanzania. I've been working with Vulcan to setup an analytics system based on Tableau software. The platform will help to calculate certain metrics such as patrol distances, collar performance and to summarize event data stored in EarthRanger in real-time. Eventually we hope to build a web dashboard that would be a single place to summarize these data. In December, we began to test a new app developed by Vulcan for reporting locations into EarthRanger from an Android phone. The app will help us track more of MEP's assets, such as vehicles, cheaply and without the need for satellite-based trackers when they are not needed and where GSM networks are sufficient. In December, we implemented a full-time program for fence-line collection across the Mara conservancies. We purchased a 'Kibo' motorbike (manufactured in Kenya) so that our dedicated spatial data ranger can move around quickly. He's using our Njia app to work his way, starting with Pardamat, across the Mara and filling in the map with new fence lines and roads. In December, we assisted with a proposal led by Enonkishu Conservancy to build a new electric fence at the northern boundary of a private commercial farm to prevent elephants from exiting and crop raiding in the community area and village of Munyas. Very

little elephant range would be affected by this fence and it would significantly reduce crop-raiding incidents.

Tracking Manager's Update:

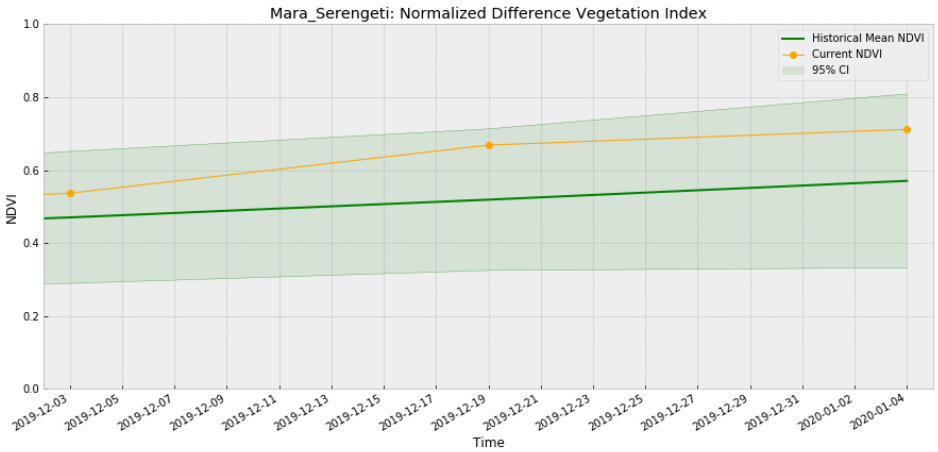
MEP collared elephant Namunyak was seen with the herd of 30 by a MEP ranger team. Kegol and Fred spent most of this reporting period together after the loss of Hugo. Kiambi was spotted with Chelsea's herd during this reporting period and Chelsea was spotted with a herd of 40 elephants. Ivy's herd was also monitored on the ground by MEP rangers and had reached the size of 30 elephants. Collared elephants Hannibal and Napolean spent the reporting period together and Fitz was visited several times by rangers. Alice's herd was crop raiding and required MEP rangers to mitigate conflict in several instances.

MEP collared elephant Fred spotted by rangers while out on patrol.

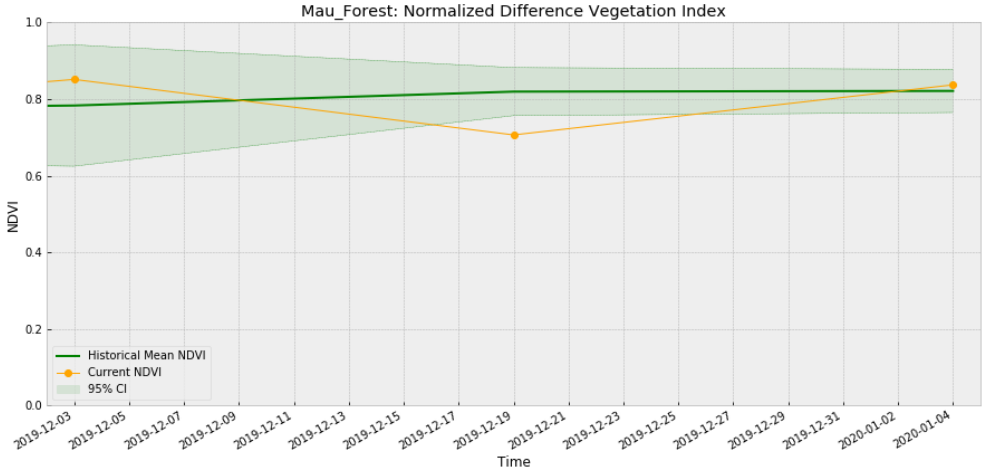
ENVIRONMENT: NDVI

Normalized Difference Vegetation Index (NDVI) is a measure of plant photosynthetic activity. Higher NDVI indicates the plant is greener. The orange trendline shows the current value while the green area shows the 95% distribution of values centered around the green trendline from values measured back to February 2000.

Mara – Serengeti

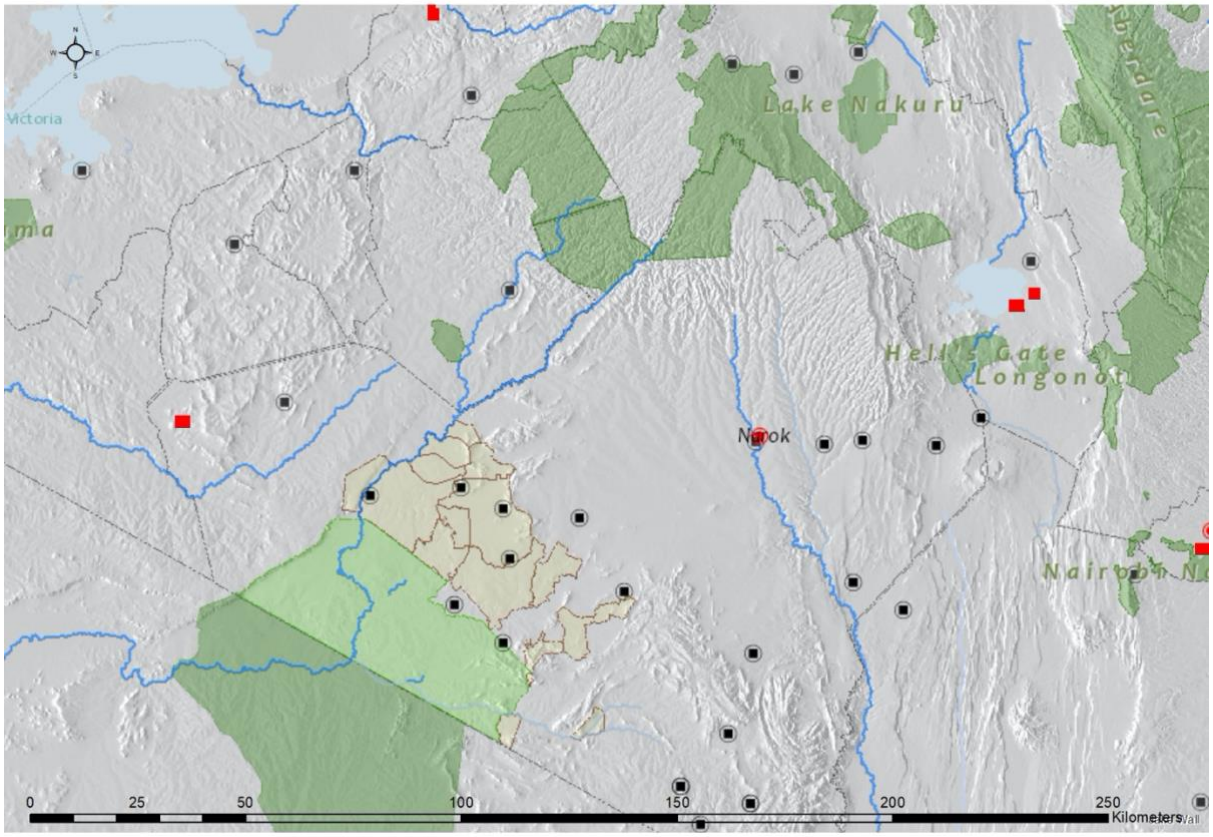


Mau Forest



ENVIRONMENT: Burn/Fire Areas

Red blocks indicate burn areas as measured by NASA's FIRMS dataset. Accessed through Google Earth Engine. There were no fires in the Mara or Mau during December.


Victoria
Lake Nakuru
Hell's Gate
Longonot
Nairobi
0
25
50
100
150
200
250
Kilometers