

MEP February 2021 Report



During the first week of February, MEP rangers spotted a brand new, maybe only days old, baby elephant.

Right now, the Mara is nice and green so there is lots of food for their moms to make milk.

GENERAL

February was a very wet month in the Greater Mara Ecosystem (GME). Mara Elephant Project's rangers stationed in the field had to deal with increasingly impassable roads, wet camp sites and overflowing rivers all while continuing their efforts.



Wet elephant tracks and MEP rangers in their rain gear traversing the heavy rains while on patrol.

On February 3, MEP joined with our partner Seedballs Kenya to distribute seedballs that were given by generous donors in the Nyakweri Forest. They included three naturally occurring species acacia gerradii, acacia seyal and olea Africana. Our actions were highlighted by the <u>Nation</u>.



Seedball distribution in the Nyakweri Forest.



On the 19th Marc, Wilson and Brian Heath attended the commissioning launch of the Maasai Mara Management Plan which was launched by Cabinet Secretary Najib Balala and hosted by Maasai Mara Wildlife Conservancies Association (MMWCA). The plan is an important document which will provide a platform for sustainable development, better define conservation areas, and corridors. MEP plans to take an active part with MMWCA to define some of these important areas for wildlife.

SECURITY, ANTI-POACHING & CONFLICT

On February 7, MEP's intelligence team and Kenya Wildlife Service (KWS) made an arrest on the Kenya/Tanzania border and seized 42.2 kg of ivory. During the arrest, one of our officers was minorly injured when the suspect tried to unsuccessfully escape. Then, just a week later on February 16 on the border again, MEP's intelligence team alongside KWS arrested one suspect with five pieces of elephant tusks weighing 27 kg.



The two arrests and ivory seizures in February.

In the early morning hours of February 6, MEP rangers got a call from community members in the Emarti area that elephants had been in their farms overnight and left behind a lot of damage. We responded immediately despite the heavy rains the night before to help assess the damage, take note of the extent and come up with a plan for increased protection so it doesn't happen again. On February 12, MEP rangers responded when elephants destroyed a strong metal electric fence surrounding Olemoncho School. They broke trees outside of the fence to bring both the fence and its electrical system down to then easily pass-through school grounds. Luckily no one but the fence was hurt, and MEP rangers responded to help with repairs.





Crop damage from elephants on February 6 and the damaged school fence.

MEP rangers joined KWS and Olarro Conservancy rangers to help combat the rise in bushmeat poaching activities. This team was deployed to the corridor linking Olarro to Olkinyei Conservancy and their efforts proved successful by removing snares and confiscating charcoal.



The joint Olarro patrol mission to remove snares.



Charcoal bags recovered and kilns destroyed in February.

In total, in February, MEP rangers arrested one bushmeat poaching suspect, confiscated 5 kg of bushmeat and removed two snares. Eight habitat destruction suspects were arrested, three power saws confiscated, seven kilns destroyed, and 490 posts recovered. There were seven total conflict incidents MEP rangers responded to in February. In February, MEP rangers covered a distance of 1,309 km on foot, patrolled 6,905 km by car and 2,350 km on motorbike.



HELICOPTER

On February 5, MEP's rangers were called into Ngoswani Center when a group of bulls had gotten stuck inside a fence. After the ranger's efforts on the ground weren't moving the bulls and tensions were rising, the leased MEP helicopter was called in to quickly move the bulls to safety. The helicopter successfully moved the bulls out of the fenced area. The helicopter flew just over 17 hours in February.



The leased MEP helicopter photographed from the ground by MEP rangers all working together to move elephants out of Ngoswani Center.

COMMUNICATIONS & FUNDRAISING

Mara Elephant Project celebrated Valentine's Day in February and we appreciate everyone who supported us to spread the love. We also once again earned the GuideStar platinum seal of approval for 2021. This recognition means everyone can now see our most recent strategy, metrics, and achievements. The Q3 and Q4 2020 Newsletter was sent on February 1 highlighting our efforts in the second half of 2020.

MEP had 18 amazing enties in the Greatest Maasai Mara photo competition for February. Thank you to Adam Zdebel, Clair Nicol, Amish Chhagan, Edouard Wenseleers, Ebrahim Anjarwalla, Pranav Chadha, Riz Jiwa, Gurcharan Roopra, Aditya Nair, Will Burrard-Lucas, Annamaria Gremmo, Sushil Chauhan, James Harrison and Romit Shah for your support.



A February entry by photographer Edouard Wenseleers in the GMM photo competition.



MEP Kenya Trust received two donations from Foreningen Forsavara Elefanterna totaling KES 128,520 and we also received an installment of the Sheldrick Wildlife Trust grant for 2021 Mau team support. Mara Elephant received \$113,488 from 196 donations via the Sidekick Foundation in February this included \$9,065 via PayPal and a \$37,000 payment from our direct mail campaign. Thank you to Richard Leirer, Karen Kehoe, Ethalinda Blackman, Maturin and Carolyn Finch, Steven Hahn and Pranhitha Reddy, and Mike & Margy McCormick. We also received the first installment of a new grant from the Smithsonian Conservation Biology Institute and the Indianapolis Zoological Society, Inc. We received three \$10,000 donations from Carolyn Sunny Shine, Gay Rogers and Leslie L. Alexander Foundation.

RESEARCH & CONSERVATION

Director's Update

The Mara continued to stay green and beautiful in February despite last year's forewarnings of drought. We made progress with the Elephant-Book platform with our collaborators from Elephants Alive (SA) and Caltech. Six undergraduate students are also currently partaking in an exercise to update photos of the Mara's elephants taken by Dr. Joyce Poole (Elephant Voices) with their corresponding '(System for Elephant Ear-Pattern Knowledge) SEEK' codes for reidentification by the MEP team.



The bull elephant 'Edwin' photographed by Roisin Allen in Mara North Conservancy.

I participated in Google's AI for Social Good (virtual) conference in February and hope to start collaborations with AI experts in the analysis of elephant movement behaviour and land cover feature extraction. We have submitted funding proposals to Google for this work. We hosted Stephen Ndambuki at MEP HQ for two days in February to review the status all of our joint projects and research collaborations and are looking forward to moving forward on all fronts in 2021. A very good article on the fencing situation was published this month by Joseph Ogutu and collaborators. MEP's fence data is becoming increasingly important in tackling this growing environmental issue.

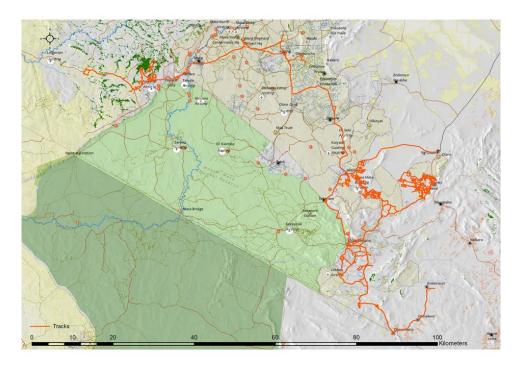
| Year | Month | Electric | Other | Wire | De- fenced | Total (kms) |
|------|----------|----------|-------|--------|---------------|----------------|
| 2019 | November | 48.27 | - | 18.35 | | 66.62 |
| 2019 | December | 81 | - | 59 | | 140 |
| 2020 | January | 111.16 | 4.64 | 124.71 | | 240.51 |
| 2020 | February | 101.62 | 1.17 | 33.99 | | 136.78 |
| 2020 | March | 48.59 | 0.14 | 59.76 | | 108.49 |
| 2020 | April | 19.78 | 0 | 10.38 | · | 30.16 |
| 2020 | May | 24.75 | 1.88 | 41.18 | | 67.81 |



| 2020 | June | 15.19 | 1.48 | 107.88 | | 124.55 |
|------|----------------|---------|--------|---------|-------|---------|
| 2020 | July | 37 | - | 52.76 | | 89.76 |
| 2020 | August | 60.12 | 7.52 | 40.08 | | 107.72 |
| 2020 | September | 126.95 | 7.15 | 221.44 | 15.18 | 370.72 |
| 2020 | October | 109.05 | 10.57 | 218.99 | 1.78 | 340.39 |
| 2020 | November | 101.2 | 24.52 | 153.12 | 13.88 | 292.72 |
| 2020 | December | 62.99 | 9 | 190 | | 261.99 |
| 2021 | January | 87.9 | 19.4 | 121.09 | 5.2 | 233.59 |
| 2021 | February | 79.2 | 22.9 | 175 | - | 277.1 |
| | Total (kms) | 1114.77 | 110.37 | 1627.73 | 36.04 | 2888.91 |



Research field assistants noted bones in fences during the month of February.



Movements (orange tracks) of MEP's three field assistants during February. All of our field assistants are working on mapping fences, roads and landcover ground-truthing points using motorbikes and our Njia app.

They recorded 277.1 km of fences and 181 LCC points in February.



Tracking Manager's Update

The rain in the Mara has meant a lot of ripe farms that many of KWS and MEP's collared elephants have taken advantage of in February. Ivy was staging during the day with her herd of 20 in thick brush nearby farms, then going in at night. Fitz was in Nyakweri Forest for the most of February doing the same, spending the day in thick parts of the forest and heading out to open areas to crop raid at night. Ritan was doing the same over in the Chemesusu Forest and Matali was largely at the bottom of Lemek Hills and at night he broke geo-fences, crossed roads and made inroads into the human settlements. Lempiris was in the community lands around Ngosuani for the entire month of February.

Fred has been traversing Mara North, Lemek and Olchoro conservancies for most of February, keeping close to Mara River. He made brief ventures into the MMNR and Oloisukut Conservancy for three days and back. Several low-speed alerts were received from his collar and upon checking on him, MEP team found him doing fine.

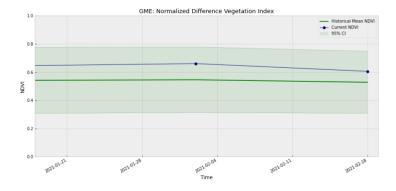


Collared elephant Fred photographed in February.

ENVIRONMENT: NDVI

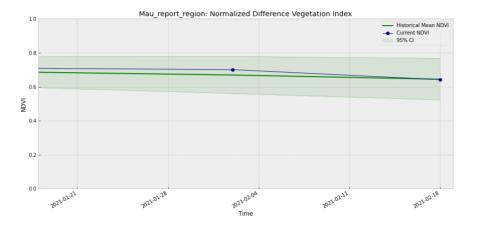
Normalized Difference Vegetation Index (NDVI) is a measure of plant photosynthetic activity. Higher NDVI indicates the plant is greener. The blue trendline shows the current value while the green area shows the 95% distribution of values centered around the green trendline from values measured back to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

Greater Mara Ecosystem (GME)

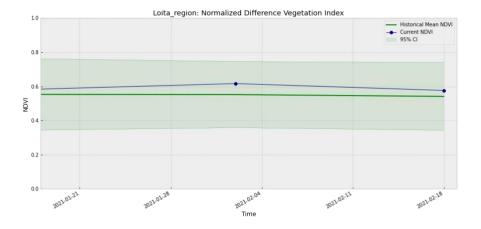




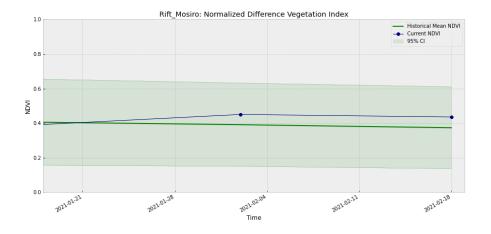
Mau Forest



Loita

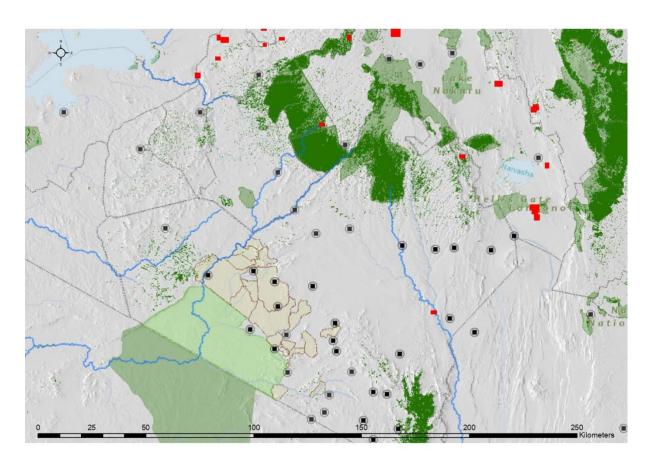


Rift Valley





ENVIRONMENT: Burn/Fire Areas



Red blocks indicate burn areas as measured by NASA's FIRMS dataset during the period February 1, 2021 – March 1, 2021. Accessed through Google Earth Engine.