

MEP May 2019 Report



MEP's Loita patrol team near their camp in the Loita Forest.

GENERAL

This month the Mara has again showed signs of drying up. The river level remains very low and we can only hope we get some out of season rains in June; otherwise the rains have all but failed. Livestock in the area have started to show the strain and wildlife won't be far behind if we do not get adequate rain soon. Elephants depend on grass, seedlings, tree branches and bark to sustain themselves and during this dry season we will see increased destruction of trees to get the more succulent branches as the grass banks inside the conservancies are depleted. Inside the Mara Triangle large herds of elephant are still able to get sufficient food in the swamps, the long grass plains, and the riverine forests.

Maize crops in the Munyas area are nearing harvest time and we have seen a huge increase in conflict in this area. The Munyas human-elephant conflict (HEC) team has been reacting to conflict in this area on a daily and nightly basis. A number of farms have already been destroyed and farmers have retaliated by shooting elephants with arrows. We have met this challenge by deploying this team at night to safely chase the crop-raiding herds before they enter too deep into the farms.



MEP rangers assessing crop damage in Munyas on May 19.

The intelligence team had a significant success this month and is truly one of MEP's brightest jewels. Representatives from Wildlife Justice Commission came to MEP to learn more about how our intel team works and how WJC might support us with an analyst and



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training. We look forward to seeing what they can offer. Please see more details in the security section.

Our operational teams have received a huge boost from a long-time MEP supporter Lori Price and the Elephant Crisis Fund (ECF), an initiative launched by Save the Elephants and the Wildlife Conservation Network, in partnership with the Leonardo DiCaprio Foundation. Their support has allowed MEP to increase patrol operations in the western portion of the ecosystem in the areas of Loita, Siyapei and Mosiro in the Rift Valley. This area continues to be a concern for elephant security and their presence will go a long way to improving security.

We are excited to announce that the new helicopter owned by the Karen Blixen Camp Trust arrived on schedule on the 27th of this month. We expect that the new R44 will enter service as the only helicopter dedicated to conservation in the Mara by the 15th of June. We will however need to raise significant funding for flying time.

MEP held its AGM and board meeting on May 23 and in this meeting, Kevin Rodrigues was introduced and voted in as the newest MEP Trustee. Kevin is an investment professional with over 13 years of experience in investment banking, merchant finance and private equity gained in the United States, Europe and Africa. Kevin currently works as a Director at LGT Lightstone, managing investment activities in Eastern & Lusophone Africa. Kevin holds an MBA from London Business School, UK and a B.A. (Economics) from Northwestern University, USA. MEP is delighted to have him as a new trustee. During the meeting the board approved the amended budget, the 2018 audited accounts, new policies to address potential risks identified in the annual audit and re-appointed PKF as the auditors for 2019. Updates were also given to the board on operations, research and MEP's fundraising position.

SECURITY & ANTI-POACHING

This month the MEP intelligence team were responsible for two notable ivory arrests.



*The arrest of one suspect and
seizure of 25 kg of ivory on May 19.*



Suspect arrested on May 3 in possession of 17 kg of ivory.

In addition to these arrests and ivory seizures, MEP rangers also removed 22 snares, destroyed two poacher's camps, confiscated 40 cedar posts, 250 wood posts, eight sacks of charcoal and Kenya Wildlife Service arrested one suspect for illegal charcoal production. The Sheldrick Wildlife Trust Mau Team recovered more than 70 kg of illegal bushmeat in the Mases area and MEP rangers assisted the KWS Vet Dr. Limo with the Sheldrick Wildlife Trust Mara Mobile Vet Unit in two elephant treatments in May.



KWS Vet Dr. Limo treating an elephant on May 20.



The 70 kg of bushmeat recovered by MEP rangers on May 12.



The Sheldrick Wildlife Trust Mau team recovered seven snares on May 18.



250 posts found and destroyed by MEP rangers on May 6.



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Human-Wildlife Conflict Incidents

There were 23 incidents of human-elephant conflict this reporting period, the most occurring in Munyas where maize crops were ripe.



*A MEP ranger shooting a firecracker
away from an elephant herd in
Munyas to safely move them away
from the crops.*

*MEP rangers helping to repair a
broken fence after elephants
moved through the area.*



Conflict is on the rise and a human-elephant conflict meeting was held at Kimelok School in the Oloonkolin area. Among the stakeholders; KWS Kilgoris Warden, MEP, MNC and the Oloisukut Conservancy all attended. The objective was to discuss the long- and short-term solutions to the continuing conflict in this area. The long-term solutions discussed were: building a twenty kilometers electric fence to prevent the wild animals not to raid the crops across the river; employing some people as part of the rangers. The short-term solutions discussed were; putting the solar lights in all hot spot crossing areas to stop the elephants from crossing into farmland and increasing the ranger's patrols to both day and night to move the elephants back as part of the quick response help.



The HEC meeting that took place with key stakeholders.

Ranger & Vehicle Tracking:

In May, MEP rangers covered a distance of 960 km on foot; 13,835 km by car and 4,022 km on motorbike.



A MEP ranger camp in May.



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COMMUNICATIONS & FUNDRAISING

In terms of media coverage, MEP had an exciting month when the BBC Two series, [*Equator from the Air*](#), aired in the UK on May 26 with the first episode featuring Mara Elephant Project. Additionally, the [Daily Mail](#) picked up on the story told during the episode about two elephant treatments MEP assisted with and featured MEP in an article the following Monday. All of this is great media exposure for Mara Elephant Project.

A promotional image for the BBC Two series "Equator From The Air". On the left, a man with grey hair, wearing a green button-down shirt and dark trousers, stands in front of a military helicopter. He is holding a camera. The background is a savanna landscape under a cloudy sky. On the right, there is a black box containing white and yellow text. The text includes the title "Equator From The Air", the start date and time "Starts Sunday 26th May, 8pm on BBC Two and iPlayer", the presenter "Presented by Gordon Buchanan", a list of production credits, the hashtag "#EquatorFromTheAir", and logos for "DRAGONFLY", "BBC TWO", and "EndemolShine UK".

Equator From The Air
Starts Sunday 26th May, 8pm on BBC Two and iPlayer
Presented by Gordon Buchanan

Producer Directors Nicola Tremain & Anne Sommerfield
Producer Anna Williamson
Assistant Producer Joseph Russell
Composer Nainita Desai
Director of Photography Neil Harvey
Production Manager Sophie Wright
Editors Zoe Davis, Steve Williams & Whetham Allpress
Edit Producers Ben Finney & Jamie Berry
Exec Producers Richard Bond & Ruth Shurman

#EquatorFromTheAir

DRAGONFLY **BBC TWO**
EndemolShine UK

Equator from the Air aired on May 26 and featured Mara Elephant Project.



Gordon also watches vets help a baby elephant, pictured, after its trunk gets stuck in a snare

The Daily Mail article that featured MEP.

In April, per our report, MEP confirmed we received funding from the ECF for a dedicated vehicle in Loita. This is not only a great funding opportunity for MEP, but it's also a great way to connect with ECF's vast network of supporters on social media. On May 31, ECF posted on both Facebook and Instagram to their over 52,500 followers featuring their contribution to MEP.

The MEP Ranger School Fees Facebook Fundraiser raised \$2,350 with 35 people who donated online and one of MEP's long-time supporters chipped in another \$5,000 to ensure we met our goal of close to \$7,500, which was then matched by a grant awarded to MEP last month from the JE Fehsenfeld Foundation. This means MEP has fully funded the 2019 Ranger School Fees program! Thank you to everyone for their support! Kaila Fusco Designs, a Kenyan jewelry designer, gifted 50% of her proceeds from her animal jewelry collection in May to MEP. We are awaiting final numbers on sales but appreciate grassroots efforts like these to raise funds for our organization. The Greatest Maasai Mara photo competition is still going on strong with many wonderful May entries that benefitted MEP. Thank you to Colby Davidson, Charlotte Rhodes, Rihaz Sidi, Barbara Jensen Vorster, Jodie Cridland, Mary Ngumo, Nico Sharpe, Rose Maria Pastor Nicolas and Stephen Underwood for their support!



An entry that benefitted MEP by Charlotte Rhodes in the Greatest Maasai Mara photo competition.

MEP released our [first quarter newsletter](#) to supporters on May 3 that highlights our operations over the first three months of 2019. We also celebrated Endangered Species Day on May 17 and raised \$580 on Facebook and \$5,475 on PayPal in May. MEP has a very busy visitor season coming up in June and appreciates all of the camp's support in booking guests for the MEP Visitor Experience. MEP is 100% reliant on donor support and getting to know the conservation minded tourists coming to visit the Mara is a priceless opportunity for our organization. We'd also like to thank a donor for celebrating their 70th Birthday by donating \$1,442 to MEP.

In May, MEP received notice from Paradise International Foundation that they would be supporting the protection of two collared elephants for three years and the operating costs of a rapid response vehicle all with a \$65,000 donation we received this month. Additionally, the MEP direct mail campaign that is currently happening in the U.S. has been extremely successful with around \$15,000 of donations netted with the first mailing. More final numbers on this will be available in July.

RESEARCH

Director's Update:

At the beginning of May, we hosted Dr. Iain Douglas-Hamilton at MEP to discuss ongoing collaborations with Save the Elephants (STE). STE has been at the forefront of elephant conservation and research for decades and helped to kickstart MEP's own elephant tracking program. We were happy to show Iain the progress MEP has made in recent years.

In early May MEP hosted a team from RESOLVE that are building an artificial intelligence (AI) based camera that uses a new processor developed by Intel for 'edge analytics.' The processor can run AI models in real-time to identify objects of interest within seconds. RESOLVE has harnessed this technology and combined it with a low-profile camera body and satellite modem that can be deployed in the field for months and remotely transmit only photos with either humans or wildlife in the photos. Known as TrailGuard, this will be a major breakthrough for camera trap technology as often a lot of false positives are triggered by a moving leaf or grass making it difficult to use camera traps in operational settings. We interfaced the TrailGuard cameras with MEP's EarthRanger system and are ready to deploy them once they come off of the production line.

In mid-May I hosted Dr. Lydia Tiller from the Elephants and Bees program in Tsavo. Lydia did her PhD work on human-elephant conflict in the Mara and will also be collaborating with MEP on our research. Lydia came to train on the software tools I built for analysis of GPS tracking data.

At the end of May, I was invited by Dr. Peder Bocher at Aarhus University to give a guest lecture during an advanced GIS course taught at Karen Blixen Camp. Peder led a very important paper on identifying the proliferation of fencing in the Mara using satellite data. My lecture at KBC was to teach the ArcMET package I developed for movement data analysis (www.movementecology.net). I look forward to working more closely with Peder and Aarhus University on research in the Mara.

Tracking Manager's Update:

Collared elephant Fred was crop raiding on May 27 and required rangers to go push him back into the safety of the conservancy. Namunyak and Lempiris were spotted together in May.

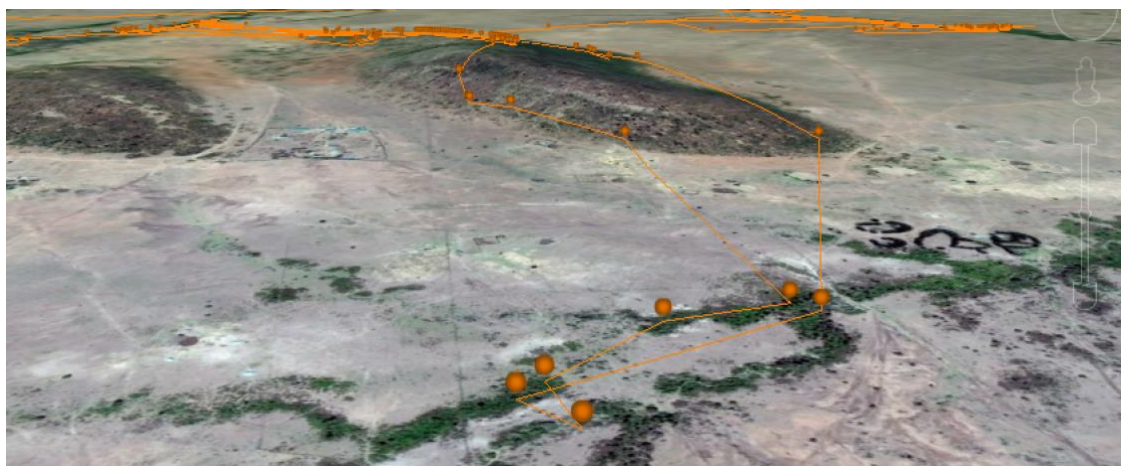


Namunyak with her herd photographed by MEP rangers in May.



MEP collared elephant Fred photographed in May.

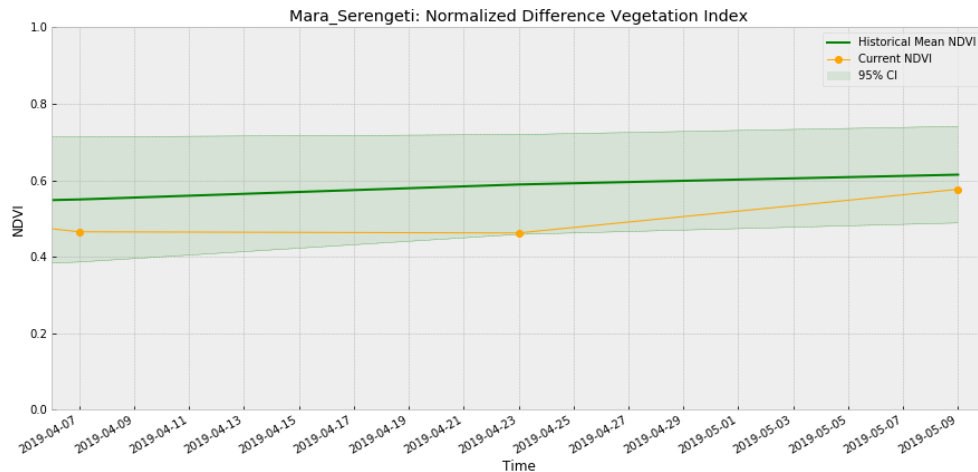
MEP collared elephant Caroline's movements in May were of note. She is one of MEP's longest continually tracked elephants in the Mara ecosystem and has been residing in an area with many human settlements. MEP got a geo-fence alert that was triggered by her movements into areas of settlement. What we noticed this month was that Caroline was climbing a hill in the early morning, staying on the hill throughout the day, then coming down the hill to drink at night, which is behavior indicative of elephants living in a stressful state in a human-dominated landscape. Although there is adequate vegetation on the hill where Caroline and her herd reside during the day, it costs an elephant 2,500 percent more energy to climb one vertical meter compared to traveling one meter horizontally and so frequent hill-climbing is not energetically profitable for an elephant. We do not know Caroline's motivation for being in this area, but her movements have shifted out of her normal pattern of behavior and her use of the hill for daytime concealment and the night-time drinking indicate she was feeling under threat from the human factors in that area.



You can see clearly Caroline's path in May and how she's climbing up and down that hill.

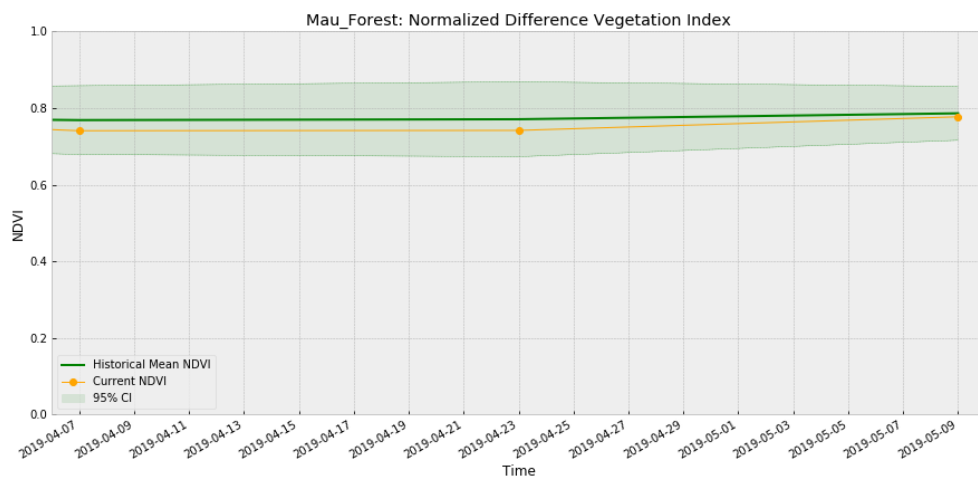
ENVIRONMENT

NDVI (Maasai Mara):



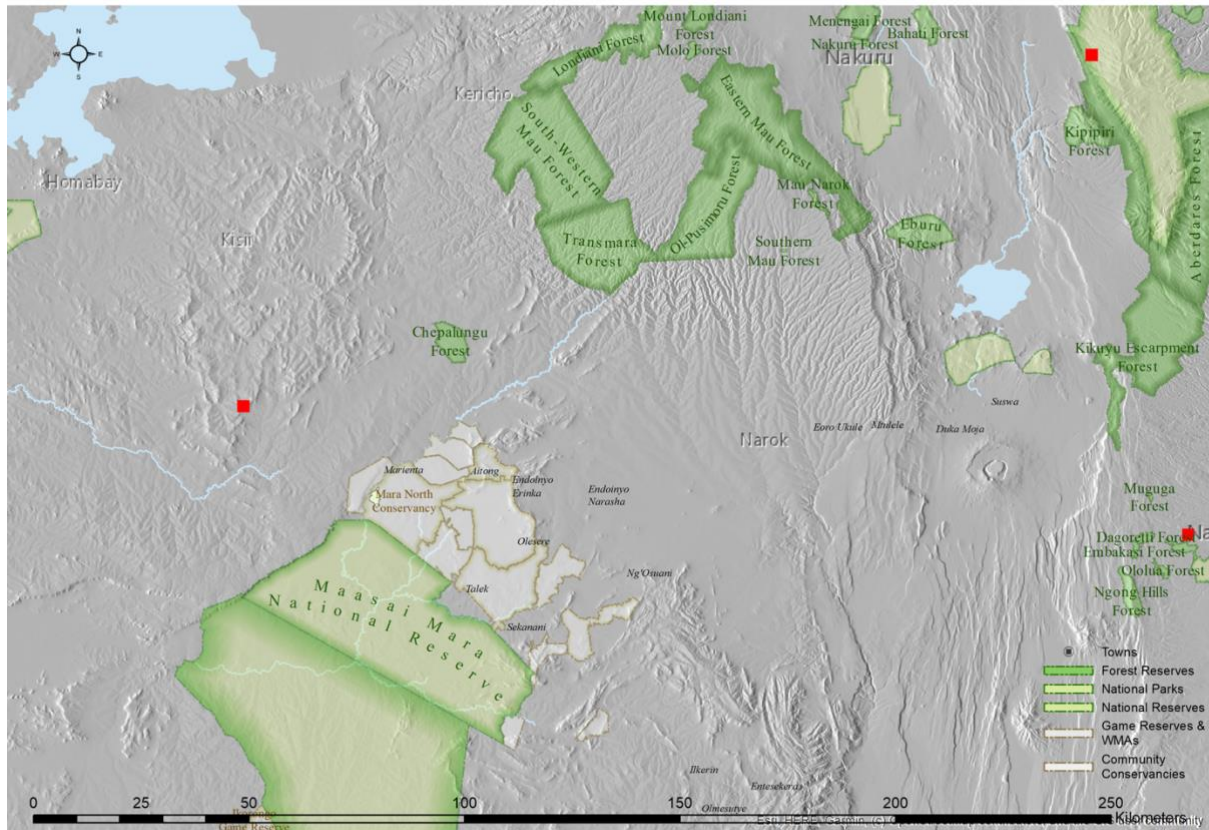
The Mara experienced lower than average vegetation greenness in mid-April after being greener than normal in the early part of the year. On April 23 the NDVI measurement was two standard deviations below normal for that time of year. By May 9 average greenness was still below average but climbing with the start of the rains.

NDVI (Mau Forest):



By May 9 NDVI levels were approaching the average for that time of year.

Burn/Fire Areas:



Fire occurrence in May 2019. Red blocks indicate burn areas as measured by NASA's FIRMS dataset. Accessed through Google Earth Engine.