MEP November 2020 Report

The new MEP rangers with CEO Marc Goss at their graduation ceremony.

GENERAL

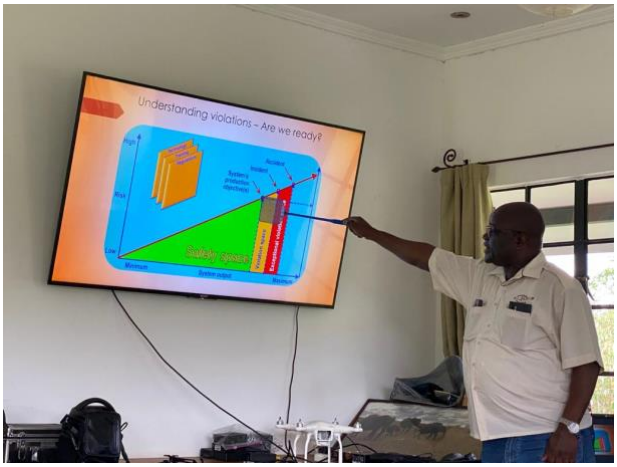
Mara Elephant Project held a recruitment for local men and women in the Loita area in September and we are pleased to announce this team has just completed their 6-week training on MEP's campus and are ready to be deployed by December 1. On November 20, a passing out (graduation) parade was held in the Entesekera trading center on the edge of the Loita Forest to celebrate the launch of the additional MEP rangers into this area. The parade was not only important to showcase the change the recruits have undergone but also formally present themselves to the community as guardians of the area. In attendance were board members from the Kenya Water Towers Agency, Deputy County Commissioner, Kenya Wildlife Service Warden, community elders, family members of the recruits and MEP management staff. MEP works alongside communities and government to increase protection for the Mara's wildlife, communities and habitat, which makes sharing these successes with them all that more meaningful. The new rangers are proud to be protecting Kenya's national heritage and their backyards. They are fully kitted with all the gear they need to operate in this area, and we are excited to see what impact they'll make in 2021.

The MEP rangers at the passing out ceremony.

On November 10, Mara Elephant Project got a call about an elephant that had gotten stuck in a sewage soak pit by Sidai Camp in the Oloolaimutia area of the Mara. MEP deployed rangers to help with the rescue efforts alongside partners. An excavator was provided by Olarro Conservancy in an attempt to dig out a path for the elephant and help the water surrounding him drain. Luckily, after several hours of work that went into the night, the pit was drained, and a path was cleared for the exhausted elephant to break free. Operations like this are only successful because of the partners that all come together to ensure a positive outcome.

Digging the elephant out into the night.

On the 11th to the 13th MEP management staff received drone safety and procedure training on drone operations from our drone consultant Kerkom Aviation Services. This training was very helpful to improve our operations safely. The course covered Safety Management Systems, Risk Management Processes, and understanding and mitigating violations. MEP will be implementing these procedures as part of operating drones safely.



Drone safety training at MEP HQ.

SECURITY, ANTI-POACHING & CONFLICT

In the first four days of November, the Mara Elephant Project / Sheldrick Wildlife Trust Mau De-Snaring Unit stationed in the Mau Forest collected 22 snares within the forest used for bushmeat poaching. The two teams operating in the Mau alongside partners Kenya Wildlife Service, Kenya Forest Service and Bongo Surveillance Project also ended November with several notable bushmeat poaching busts. On November 26, three suspects were arrested for bushmeat poaching and the team removed 12 active snares they had set nearby. The next day, the Charlie team alongside KWS and KFS arrested one suspect with 3 kg of bushmeat and confiscated three gazelle skins. Then, on Saturday, November 28, an additional suspect was arrested with bushmeat and finally, on November 30, the Charlie team arrested two suspects alongside KWS, KFS and BSP with 15 kg of bushmeat and gazelle parts. Removing these snares not only saves the smaller animals usually caught in them, but also prevents larger animals like elephants and lions from sustaining life-threatening injuries. This is especially important for the critically endangered Mountain Bongo antelope.

Pictured: the bushmeat arrest on November 28. MEP rangers with the skins and snares removed.

These teams are also tasked with shutting down illegal habitat destruction activities in the forest day and night. On November 4, alongside Kenya Wildlife Service, they arrested two suspects that were producing charcoal in the forest and destroyed the kilns found at the site. Then, the next day, they destroyed six additional active kilns and two poacher's huts

inside the forest. These poacher's huts are called that because it's where people illegally squat in the forest while they are making charcoal, logging and usually bushmeat poaching as well. That same day, the KWS rangers and MEP team also arrested two additional people that were transporting charcoal sacks out of the forest on donkeys.

MEP rangers destroying a kiln in the Mau Forest in early November.

On November 12, this team received intelligence about an illegal logging operation in the forest and when they arrived on site, they found evidence but no suspects. They were able to confiscate 26 logs and made a plan to ambush the site the next day. This proved successful when they arrested one suspect transporting timbers made from the illegally cutdown logs on a motorbike and discovered a larger tractor carting the timbers out of the forest, 21 in total. Later that week, in the Chepsir Forest, the ranger team arrested five suspects for charcoal production and destroyed four active kilns. Later that night, they set up ambush sites to catch people leaving the forest with timbers and arrested one additional suspect with timbers on a motorbike. Finally, their week ended with a big bust at night and the arrest of three suspects transporting logs out of the forest.

Illegal logs confiscated in November

Alongside partners, MEP's ranger presence on the ground helps increase protection of an area and deter illegal habitat destruction activities. The intelligence gathered and efforts to arrest suspects, confiscate timbers and destroy kilns all contributes to raising the opportunity cost for people partaking in these illegal activities in hopes that we'll see this critical important habitat maintained.

A charcoal arrest in November.

Mara Elephant Project rangers participated in an elephant treatment in November. An elephant with a spear wound injury was reported by rangers in Naboisho Conservancy on November 10. The next day, our rangers joined Kenya Wildlife Service Vet Dr. Limo from the Sheldrick Wildlife Trust Mara Mobile Vet Unit to assist with the treatment. We're happy to report that the treatment was successful, and this elephant will be closely monitored.

Overall, in November, MEP rangers covered a distance of 767 km on foot, patrolled 11,055 km by car and 2,677 km on motorbike. They arrested 23 suspects for illegal habitat destruction activities, destroyed 39 sacks of charcoal, 30 kilns and confiscated 11 trees illegally cutdown, 129 posts and 81 timbers. MEP rangers also arrested four bushmeat poaching suspects, removed 71 snares and confiscated 38 kg of bushmeat.

HELICOPTER

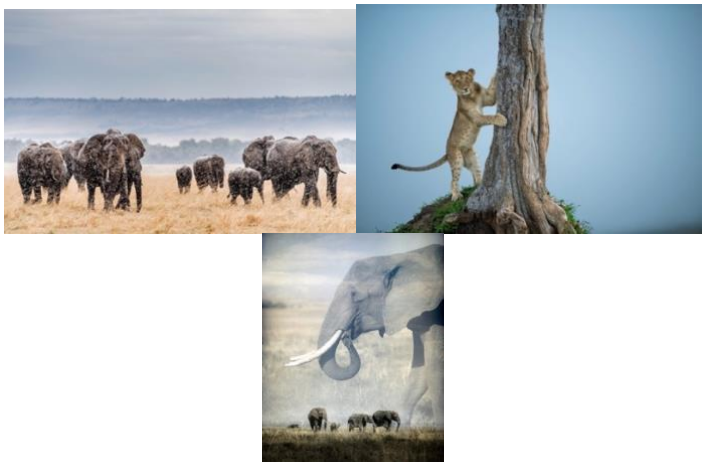
MEP has hired a R44 helicopter operated by Helicopter Charters East Africa on an hourly charge. This month we were able to do two operations using this helicopter. On the 25th KWS and MEP darted and re-collared elephant "Hannibal" whose collar was starting to fail due to an old battery. The operation was a success, and we are now able to monitor Hannibal and his large herd of over 70 individuals in real time.

Marc during Hannibal's re-collaring operation.

On the 27th we were requested by KWS Headquarters in Nairobi to push Hannibal and his large herd of over 70 individuals out of settlement areas south of Suswa mountain. The herd was very difficult to push and we only managed to push them several kilometers. The community and the KWS were very appreciative of the support.

COMMUNICATIONS & FUNDRAISING

On December 1, members of the Mara Elephant Project team will join others virtually to celebrate another successful year of the Greatest Maasai Mara photo competition. The 10 finalists for the grand prize will all be honored including three entries that benefitted Mara Elephant Project: Graeme Purdy in October, William Fortescue in August and Graham Wood in May. Thank you to everyone in 2020 who supported MEP with your entries or in the auction and a special thanks to the Angama Foundation for supporting all of these efforts. We look forward to celebrating with you all on December 1. *Pictured below: the three entries for MEP that are finalists.*



On December 12, runners from all over, including Mara Elephant Project, will be participating in the UltraMARAthon to raise funds to support the hard-working rangers of the Mara conservancies in this time of great need, to enhance the level of protection that they can provide. The greater Maasai Mara is Kenya's wildlife jewel, and her stewards mainly rely on tourism revenue to manage and protect the ecosystem. Due to the pandemic, tourism has basically ground to a halt since March, putting both conservation and local livelihoods at great risk for 2020 and into the future. MEP supports our partners For Rangers and Maasai Mara Wildlife Conservancies Association, and we look forward to running for rangers! We are moving into our prime giving season and are excited to present supporters with an option of funding MEP's newly deployed ranger unit in the Loita Plains for Giving Tuesday. On November 30, Seedballs Kenya received a donation of 25 kg of seed balls to give to MEP to distribute from Paul Meulblok. Overall, in November, MEP received a total of $38,410 in donations from 159 supporters. A special thank you to Jane B Donahue for her generous support. We received $25,000 from the direct mail campaign, $9,660 via PayPal from 131 supporters. We raised an additional $162 on Facebook and Instagram from 5 individuals in November. Thank you to Cecelia English for her birthday fundraiser and Madison Upton for her Giving Tuesday fundraiser in support of MEP.

Lets mention that Lori gave us 20k. She would like that.

RESEARCH & CONSERVATION

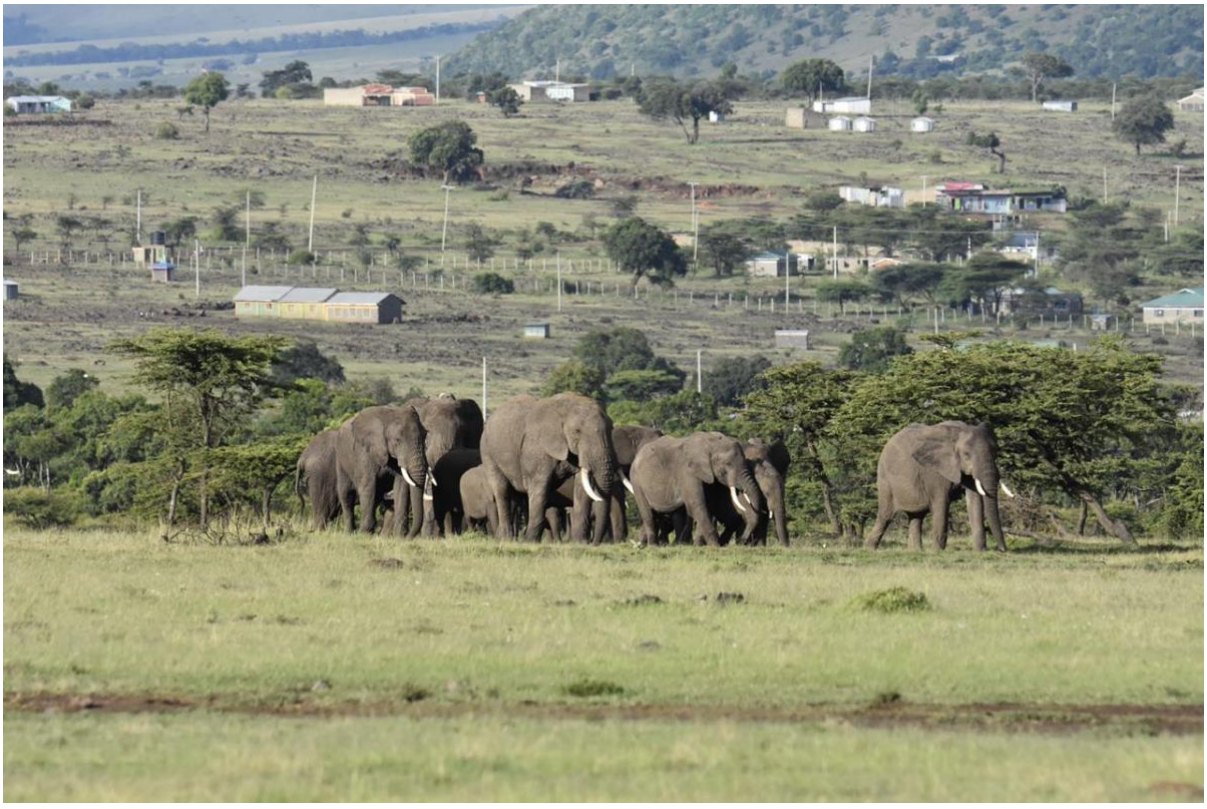
Director's Update:

It's been another wet month in the Mara as the rains have started and vegetation greenness is well above the mean value for this time of year, but predictions suggest we'll be heading into a dry 2021 with possible drought (https://blog.chc.ucsb.edu/?p=868). Unfortunately, Tressa's collar dropped off this month while she was in Tanzania. It was recovered with the help of the Mara Triangle rangers. Hers was the last of the Savannah Tracking GSM collars originally supplied by WWF. Marc was able to replace Hannibal's collar as our battery voltage monitor correctly predicted its imminent failure. We made progress with consolidating and cleaning spatial data layers in the Landscape Dynamics database. We've submitted a paper in collaboration with Peter Tyrell from Oxford/SORALO describing the database system. Public data, including the most up-to-date information on roads, fences etc., can be downloaded in different formats from ArcGIS online (https://www.arcgis.com/home/search.html?q=landDx). All of the MEP collected road and fence data is being made available through this system. Our fence team mapped a further 292 km's in November including 13 km of fences that have been taken down in Pardamat.

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
	Total (kms)	**884.68**	**59.07**	**1141.64**	**30.84**	**2116.23**

Tracking Manager's Update:
Fred, who usually sticks close by to MEP's Campus moved into the Triangle before coming back. In between, he broke geo-fences and crossed the Mara River several times.



MEP collared elephant Fred photographed in November.

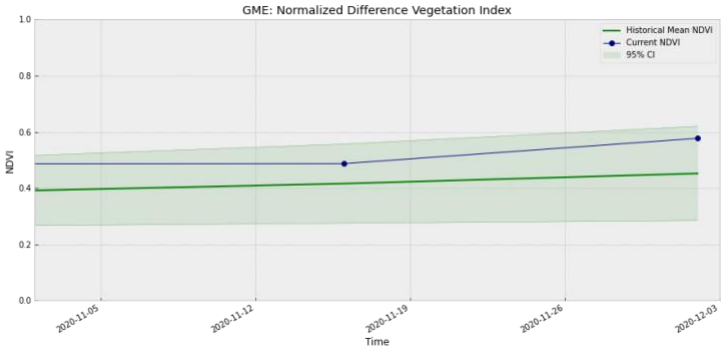
Newly collared Harriet was monitored daily by the MEP Alpha ranger unit. She and her herd have been breaking into farms and through fences because of a large damn nearby that's fenced in. Lempiris was staging in the Loita Hills during the day and crop raiding at night. Fitz, sponsored by Angama Foundation, spent the whole period in Nyakweri Forest but continued his crop raiding and kept the MEP Bravo ranger team very busy.

ENVIRONMENT: NDVI

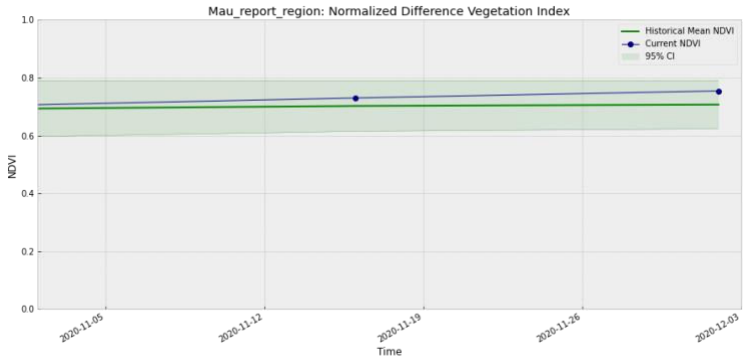
Normalized Difference Vegetation Index (NDVI) is a measure of plant photosynthetic activity. Higher NDVI indicates the plant is greener. The blue trendline shows the current

value while the green area shows the 95% distribution of values centered around the green trendline from values measured back to February 2000.

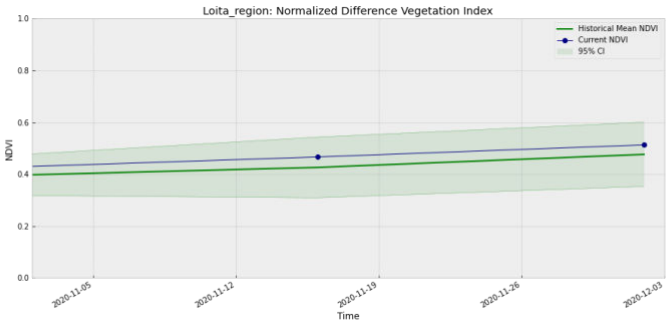
Greater Mara Ecosystem (GME)



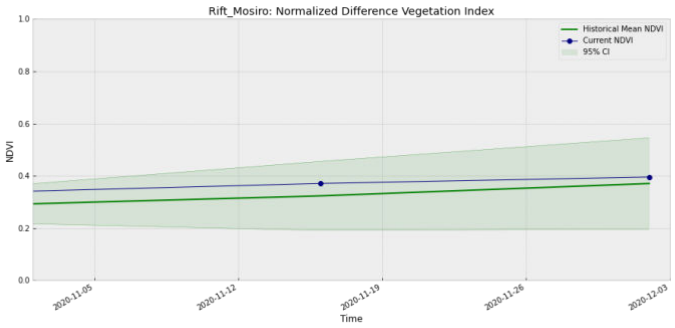
Mau Forest



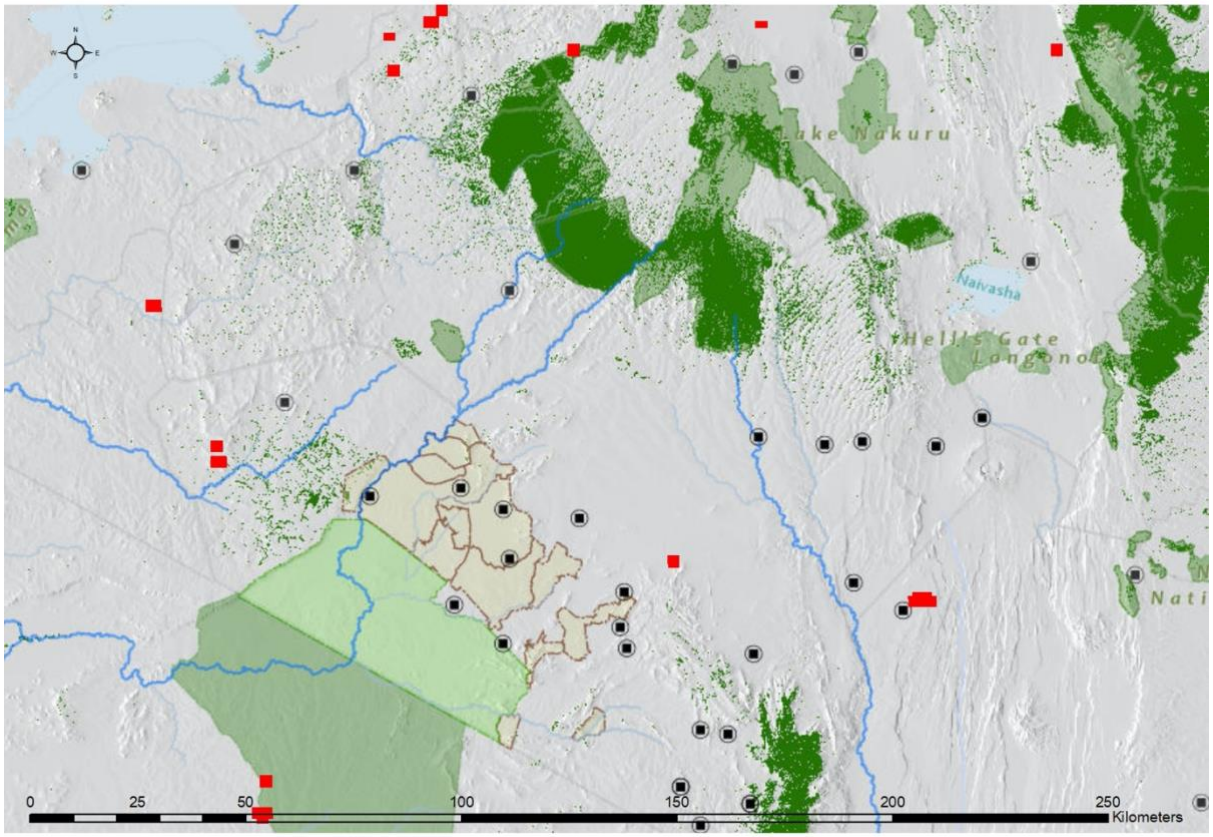
Loita



Rift Valley



ENVIRONMENT: Burn/Fire Areas



Red blocks indicate burn areas as measured by NASA's FIRMS dataset during the period November 1 – December 1, 2020. Accessed through Google Earth Engine.