MEP December 2021 Report

MEP staff celebrated Christmas in December.

GENERAL

December was a busy time at Mara Elephant Project, and as we close out another year of operation, our 10th, we continue with our mission of protecting elephants and their habitats across the Greater Mara Ecosystem.

The second annual Ultra MARAthon was a huge success on December 4 with 54 relay teams participating this year. The 50 km race through the Maasai Mara raises funds for Mara Conservancy rangers and the Africa Mission Services maternity clinic. MEP's ranger relay team won their division for the second year in a row. Congratulations to MEP rangers Stanley Momposhi, Nashola Karia, Cosmus Bett and Edward Kuyo for officially being the fastest rangers in the Mara. Additionally, MEP provided security in the air and on the ground along the running route. It was a beautiful day to run in the Mara and we congratulate all of the runners and organizers of this amazing event.

SECURITY, ANTI-POACHING & CONFLICT

In December, MEP rangers alongside government partners arrested five habitat destruction suspects, recovered one power saw, 670 timbers and destroyed eight kilns and two sacks of charcoal.

Rangers alongside government partners also arrested two bushmeat suspects, recovered 7 kg of bushmeat and removed 12 snares.

In December, MEP rangers covered a distance of 891.1km on foot in the GME and MES rangers in Shimba Hills covered a distance of 52.3 km on foot. In December, MEP rangers patrolled 14,084 km by car in GME and 1,810 km on motorbike.

HELICOPTER

On December 3, a young elephant calf was found by Maasai Mara National Reserve rangers alone. MEP's leased helicopter was immediately called in to airlift the baby to the Sheldrick Wildlife Trust (SWT) orphanage in Nairobi. Alongside Kenya Wildlife Service (KWS) Vet Dr. Limo

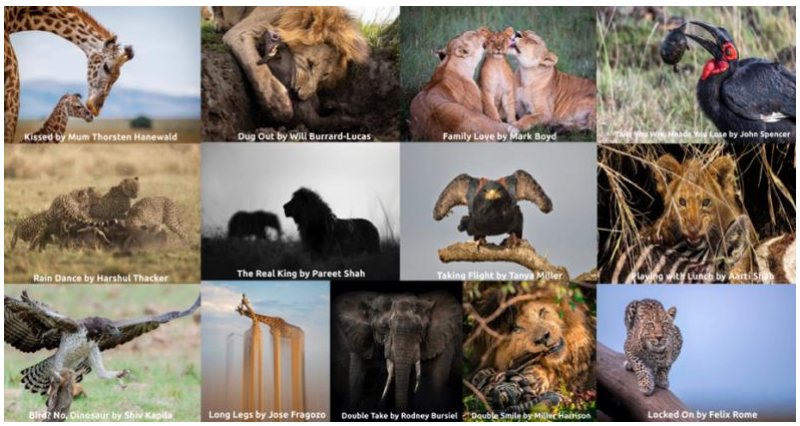
from the SWT Mara Mobile Vet Unit, we escorted her to the orphanage in the helicopter. While rare to have a baby elephant passenger in the helicopter, we are always thankful when we can rapidly respond to an elephant calf in distress.

On December 7, KWS and MEP re-collared Fitz in the Nyakweri Forest alongside the KWS Mara Vet Unit led by Dr. Limo. The MEP leased helicopter was essential to this successful operation, helping push Fitz out of the dense forest and into a clearing where he could be safely re-collared. Fitz and his herd's protection is once again supported by the Angama Foundation, who understand the importance of protecting him, his family and his home.

COMMUNICATIONS & FUNDRAISING

On December 1, The Greatest Maasai Mara Photographer of the Year was crowned for 2021. Sponsored by the Angama Foundation, this competition invites wildlife photographers from all over the world to submit their best shots from the Maasai Mara and support their favorite

conservation organization with the entry fee. Mara Elephant Project had 225 entries this year in support of our efforts and of those, 13 were finalists today out of 50 total. Congratulations are in order for photographer Harry Collins with his shot "Once in a Lifetime" for winning the grand prize of $10,000 and a 5-night stay at Angama Mara. Harry's guide Jimmy from Wild Eye Mara Camp also won a trip to Kruger National Park in South Africa. Congratulations to all of the winners and thank you to every single photographer who submitted to support MEP in 2021. Your entry fees alongside Angama Foundation's support donated $3,021 to MEP operations. If you like what you see, you can buy a print to support conservation here.



The SAWA Shop is a loyal supporter of MEP, giving back 5% of yearly sales to elephant conservation. This brand of travel bags and accessories is made to order in Kenya and features anything you'd need for life's journey. Thank you to SAWA for supporting MEP in 2021. MEP and international NGO How Many Elephants are excited to announce that the first-ever recipient of their World Female Ranger Award has been given to Caren Yegon Cheptoo, a MEP ranger deployed with the SWT Mau De-Snaring Unit. Tasked with protecting the vitally important Mau Forest in the Greater Mara Ecosystem, Caren and her ranger team combat habitat destruction, poaching and conflict in their area of patrol. How Many Elephants wants to shine a light on female rangers work in the field, and MEP is extremely honored that Caren is the inaugural recipient. Caren alongside the entire MEP ranger team all received an end-of-year bonus for this accolade. Thank you to How Many Elephants for acknowledging our ranger's important work.

Thank you to everyone for celebrating the holidays by supporting MEP! MEP Kenya Trust received $23,804 in donations in December, which included a $20,000 grant from Google as well as the Angama Foundation donation mentioned above and $541 from Foreningen Forsvara Elefanterna, a long-time supporter, and $300 from Bush Babies school that sold cupcakes and toys locally to raise money for MEP. The Sidekick Foundation, Inc. raised $531,434.71 in December

for MEP. This included our annual support from Oak Foundation, support from the Leslie L Alexander Foundation and support from many loyal donors including Sue Anschutz Rodgers and the Nicholas & Gardiner Lapham Family Fund. Thank you to the WWW Foundation from Win Rhodes, Frederic & Jeanne Groos, Douglas Allred, Lincoln Howell, the Mallory Hathaway Charitable Fund, Rhonda Sanderson, the Amy & Bart Peterson Foundation, Richard Schiff, the Edith MacGuire Charitable Trust, Sy Blechman, Roland & Joyce Bryan, Jes Lefcourt, Bruce Reichardt, the Pepper Family, Michele Roberts, Valerie Doyle, Joyce Selfman, Barbara Pope, Austin Marxe, Susan Tolbert, Karen & Jim Truettner, Deryl Santosuosso, Susan Cutter, Virginia Perez, Debra Shearer, Michael Wagner, Steven Ashelin, Pierre Schlemel, the Suzanne Butler Trust, Lesley Arnold, Elizabeth Searle, Cornelius & Angela Bliss, Joselow Foundation, Patricia Burbank & Michael Kilgroe, Dr. Quentin Regestein, John Holly, Christie Burk, Angela Crisler, Ricardo Mayoral, Joseph Davison, James Edward Cain, Randolph Lipchik, John Konopka, Carol Adragna, Avadhesh Agarewal, Scott Cadenhead, Theresa Daniel, Bruce Debell, Valerie Doyle, KLM Foundation, Ann McKinney, Margarita Romano, Jeremy Lang and Mary Vero for your end of year support.

Finally, we wanted to end the year with an exciting announcement about a new scholarship fund starting in 2022 funded by Fran and Lorne Duthie. The Fran Duthie African Conservation Scholarship will be open to Kenyan applicants in March 2022. Stay tuned for more details. Fran and Lorne gave an initial installment of $8,500 to launch this scholarship.

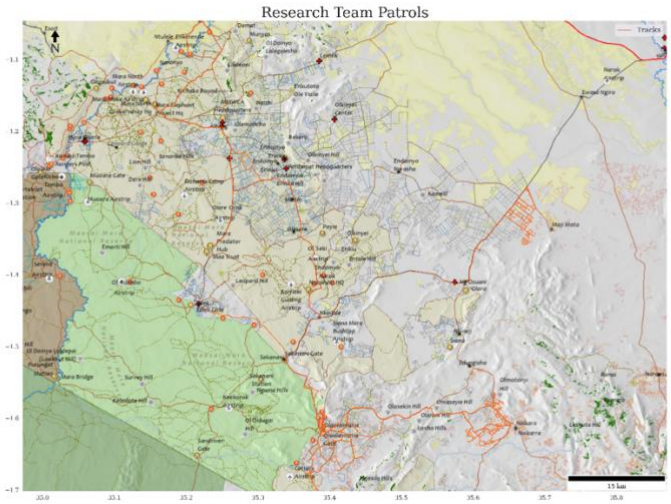
RESEARCH & CONSERVATION

Director's Update

December was a relatively slow month for the research department as many of our staff took leave and there was also a stomach bug going around. The Mara was hot and dry as evidenced by the lower than average NDVI values presented in the Environmental monitoring section. We witnessed incredible numbers of cattle in Mara North and saw a correspondingly low number of elephants. However, the Triangle was full of elephants in December.

We renamed two python software libraries we've been developing: Conservation Macroscope -> ecoscope and pymet -> movdata. Both libraries are now available on the PyPI python package index and can be freely installed. Both will be open-sourced in 2022. Our developer (Zak) is making great progress on both libraries and we now have a any easy way to upload, download and visualize data from EarthRanger. We are now focused on developing further analytical tools to help with standardized reporting.

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
2021	March	20.3	7.4	147.92	8.6	184.22
2021	April	80.2	31.05	96.4	2.3	209.95
2021	May	40.3	23.6	296.5		360.4
2021	June	37	44.8	214.2	2.7	298.7
2021	July	21	33.6	138	63.6	256.2
2021	August	14.03	48.7	159.8	0.44	222.9
2021	September	19.2	34.8	218.1	0.1	272.2
2021	October	21.7	17.9	109.5		149.1
2021	November	5.6	7.9	169.9		183.4
2021	December	-	0.6	86.4	-	87
	Total (kms)	1,374.10	360.72	3,254.9	113.78	5,112.98



Movements (orange tracks) of MEP's three field assistants during December. All of our field assistants are working on mapping fences, roads and landcover ground-truthing points using motorbikes and our Njia app. They recorded 87 km of fences and 20 LCC points in December.

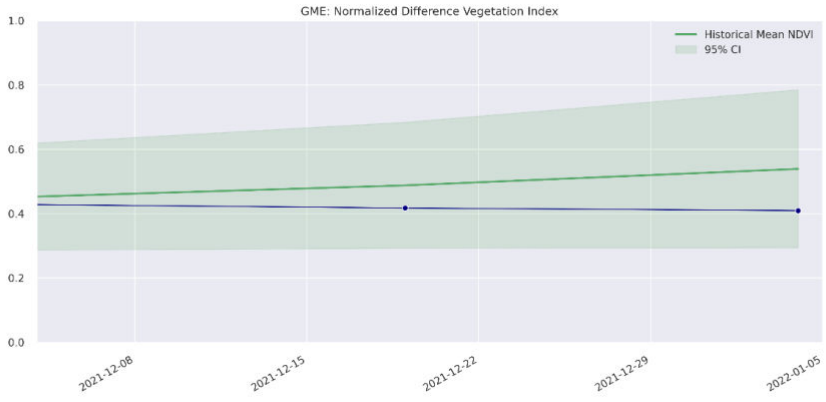
Tracking Manager's Update

KWS and MEP collared elephant Fitz, sponsored by Angama Foundation, was photographed twice by MEP rangers who responded to several conflict incidents for his herd.

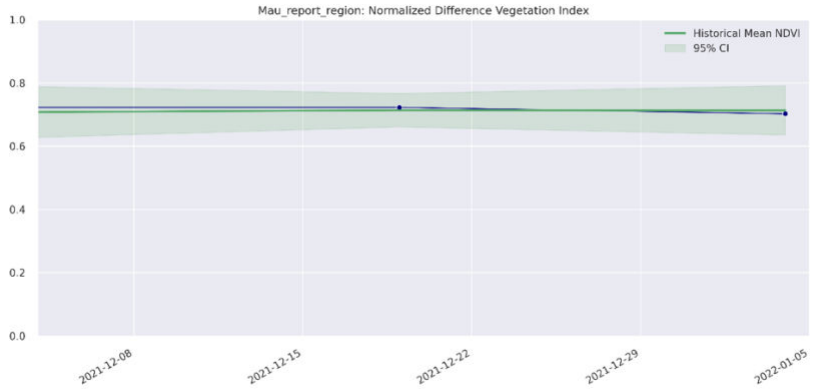
ENVIRONMENT: NDVI

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

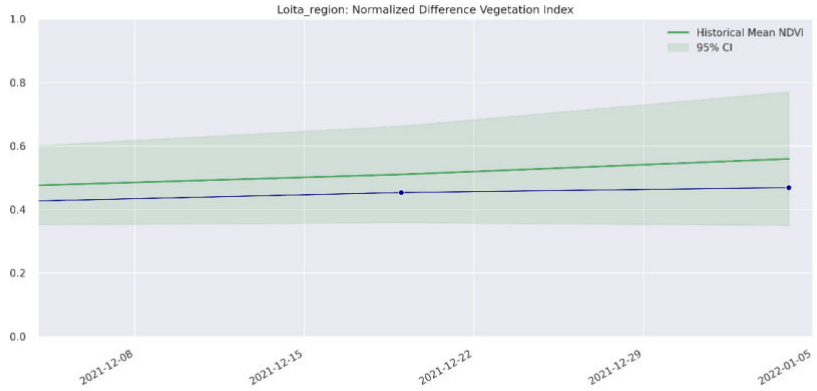
Greater Mara Ecosystem (GME)



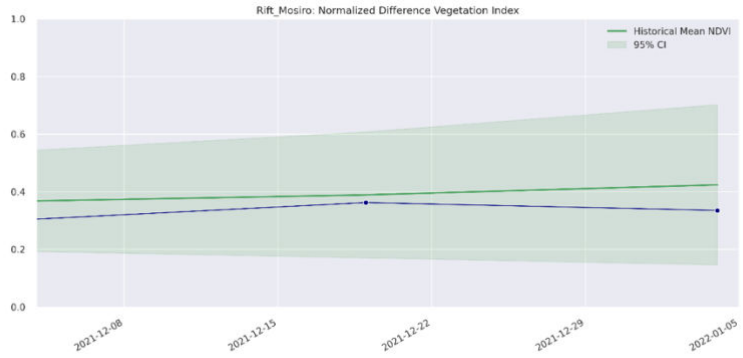
Mau Forest



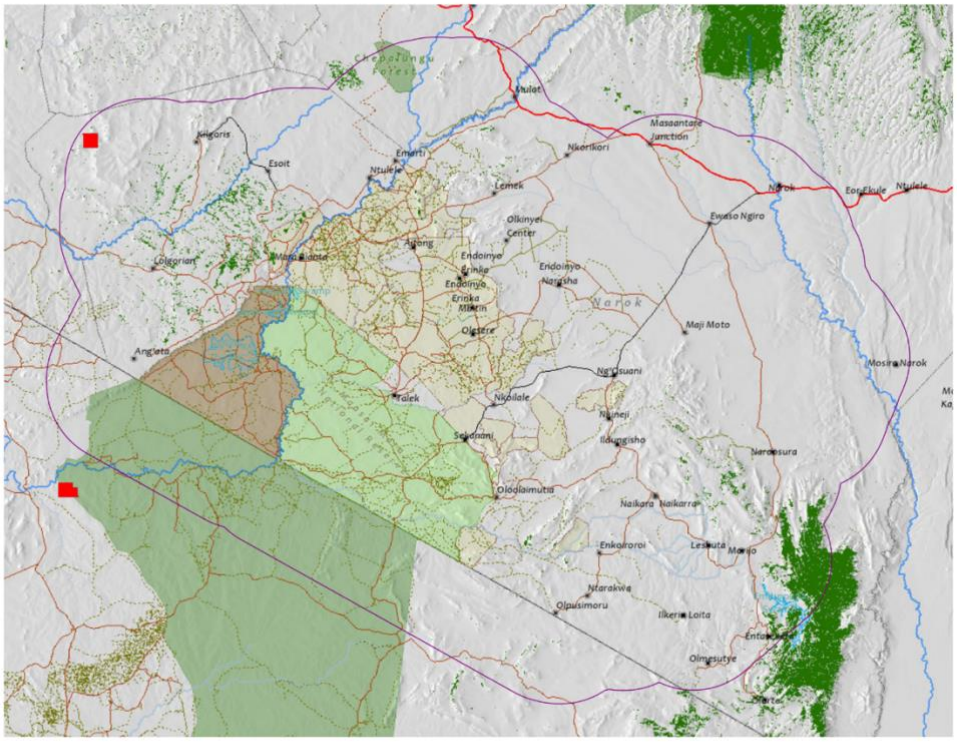
Loita



Rift Valley



ENVIRONMENT: Burn/Fire Areas



Red blocks indicate burn areas as measured by NASA's FIRMS dataset during the period December 1, 2021 – January 1, 2022. Accessed through Google Earth Engine.