

## MEP December 2022 Report



The MEP staff in the Mara at the 2022 celebration lunch. 📷 Jeffrey Wu Photography

### GENERAL

In December, Mara Elephant Project hosted our year-end celebration lunch for staff. During the lunch, Conservation Officer Wilson Sairowua gave a presentation highlighting the team's achievements in 2022, followed by a note of thanks for all the hard work by MEP staff in 2022 by DRC Jake Wall and concluded by CEO Marc Goss who announced promotions and presented badges of rank with MEP Chairwoman Beatrice Karanja. Bea, as our guest, concluded the ceremony with an uplifting speech that encouraged all of the men and women to continue on with their important work into 2023 and emphasized how she and her fellow trustees were right behind them supporting their efforts.

"While the end of the year is a time of celebration, it is also a time of reflection. We did that recently as a team and it was next level inspiring. Join me as we celebrate and thank the MEP team for all that they are and do. Our Heroes. Our Wildlife protectors. Our Community Ambassadors." Beatrice Karanja



📷 Jeffrey Wu Photography

On Saturday, December 10, the 3<sup>rd</sup> annual Ultra MARathon took place in the Maasai Mara. Over 230 runners including 65 relay teams ran alongside wildlife to support the efforts of Mara Elephant Project, Africa Mission Services and local conservancy rangers. MEP ranger Stanley Momposhi made us proud by bringing home the silver medal after running the entire 50 km (miles) course. MEP rangers alongside conservancy rangers provided security alongside CEO Marc Goss in the helicopter for an eye in the sky. Thank you to everyone who participated to support conservation and thank you to all of the tourist partners that provided logistical support and to all of the sponsors including Platcorp Foundation and Platinum Credit Kenya.



📷 Jeffrey Wu Photography

## SECURITY, ANTI-POACHING & CONFLICT

On December 30, The MEP / Sheldrick Wildlife Trust (SWT) Mau De-Snaring “Alpha” Unit arrested five suspects that had an active charcoal production operation inside the forest. Alongside the arrest with partners Kenya Forest Service, the team also destroyed five active kilns and confiscated five bags of charcoal. Also featured below, on December 2, the “Charlie” team removed 30 snares, a “Golf” team arrest on December 1 for transporting charcoal and on December 3, the same team arrested five suspects and confiscated 500 posts when they ambushed a lorry.



On December 24, the MEP “Golf” ranger unit alongside Kenya Wildlife Service (KWS) arrested one suspect with 12 kg of zebra bushmeat.



The MEP “Charlie” and “Golf” ranger teams on December 27 and 29, respectively, responded to two incidents of elephant’s crop raiding at night and leaving behind destruction once it’s light. They destroyed maize crops, cabbage, beans, spinach and bananas. After the incidents, they met with the community to discuss solutions to prevent any future damage.



On December 1, rangers from the MEP “Alpha” team attended the funeral of a woman killed by an elephant during a conflict incident. The community support was encouraging as these men and women are dedicated to preventing the worst-case scenario, like this, from happening.

Overall, in December, MEP rangers alongside government partners arrested 35 habitat destruction suspects, confiscated 38 posts, 1,246 pieces of timber and destroyed 36 kilns and 54 sacks of charcoal. They arrested three bushmeat poaching suspects, removed 33 snares and confiscated 12 kg of bushmeat. There were 21 cases of conflict MEP rangers mitigated in December.

Monitoring elephants is a key task for MEP rangers. Here are some photos of the elephant sightings in December, all noted to be healthy and in protected areas.





Rangers from the MEP “Bravo” team joined the community for a Christmas day celebration. The team deployed in the Loita area works alongside the community to mitigate conflict and reduce deforestation. They are rangers recruited from the local community to protect them and the wildlife that share their home. We hope you too enjoyed a lovely Christmas with your community, and, as our Bravo team rangers said, “happily celebrated a Merry Christmas together”.



In December, MEP rangers patrolled a distance of 1,293 km on foot in the GME and 16,400 km by car. MEP rangers covered a distance of 111.32 km on foot in Marmanet.

## HELICOPTER

In December, a young man from Talek was injured by an elephant near the Maasai Mara National Reserve boundary. He was taken to the Talek Health Center, but his injuries were graver than originally believed and he needed immediate transfer to Tenwek hospital. The MEP helicopter piloted by Marc was called in to do a casualty evacuation to the hospital as his condition was unstable. We’re happy to report that he is well on his way to a full recovery and we’re thankful we had the use of the helicopter that made the rapid response possible.



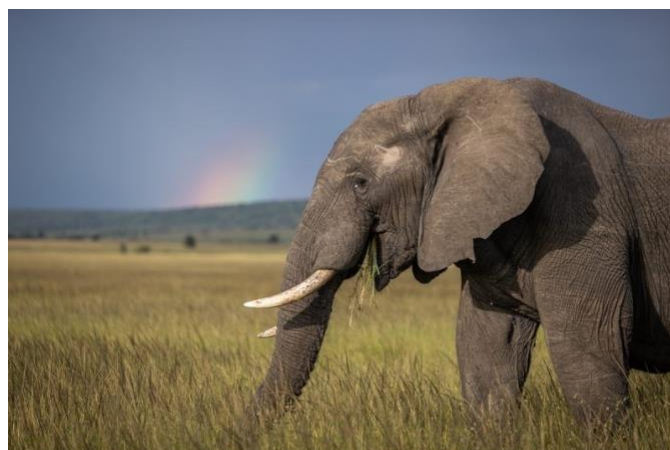




On December 18, MEP responded to assist with an elephant treatment alongside many of our close conservation partners. We received a request for aerial assistance from the Mara Triangle when a bull elephant was monitored with two suspected spear wounds on two legs. We quickly mobilized the helicopter to move the elephant out of thick brush so our partner KWS Vet Dr. Poghon from the SWT Mobile Vet Unit could treat the bull. Helping on the ground were rangers from Mara Triangle and the Anne K. Taylor Fund. The vet treated the bull's wounds and administered medication to speed up his recovery. He was back on his feet thanks to this Mara team effort.

## COMMUNICATIONS & FUNDRAISING

On December 6, the winner of the 2022 Greatest Maasai Mara photo competition was announced during an awards ceremony. Congratulations to photographers Preeti and Prashant Chacko for their winning photograph "Hallelujah". MEP is extremely grateful to all of the photographers that submitted 197 entries in 2022 to support us, see a recap video [here](#). Overall, in 2022, there were over 1,000 entries from 300 photographers and \$15,000 was raised for conservation, including a \$3,443 donation to MEP directly. We are extremely grateful to be included in this competition every year and thank the Angama Foundation for their continued support of conservation.



*An entry from 2022 by Jules Oldroyd Photography.*

Kapoeta by Ambica, a luxury collection of handmade jewelry, is supporting MEP by donating 50% of the proceeds from her Conservation Capsule Collection. You can shop her jewelry at <https://www.kapoetabyambica.com> or visit her on social media. MEP was a proud recipient of many donations, including from long-time support Elephanatics, in December dedicated to supporting the Fran Duthie African Elephant Conservation Scholarship Fund, which supports the development of the next generation of conservation leaders in Kenya by financially contributing toward their education in a conservation related field. Kampur Travel Diaries, a bespoke safari outfit, supports education, conservation, re-forestation and youth development in Kenya with a portion of profits from every safari. They supported the scholarship in December with a \$1,000 donation and committed to a long-term partnership with MEP. We are extremely grateful to Kampur Travel Diaries for their support and look forward to partnering with them into the future. You can learn more at <https://www.kampurtraveldiaries.com>.



We wanted to thank Madde Goss for working so hard on an amazing drawing of MEP rangers protecting elephants that we featured in our Merry Christmas message. You can see the compelling video [here](#).

MEP is extremely proud to announce that we've received a World Female Ranger Week grant from How Many Elephants to support the training of female rangers in 2023. World Female Ranger Week was established to amplify the voices of female rangers around the world to support their work protecting wildlife, empowering women and uplifting communities. MEP ranger Caren was the first ever recipient of the World Female Ranger Award, and MEP is extremely grateful to How Many Elephants for this continued acknowledgement of our female ranger's efforts to protect elephants and their habitats.

In December, Mara Elephant Project Trust received \$7,253 in donations, thank you to Foreningen Forsvara Elefanterna for your continued support. The Sidekick Foundation, Inc. d/b/a Mara Elephant Project USA received \$786,223.64 in donations in December, we far exceeded our original goal, and we have many people to thank for that. A very generous foundation, who requests to remain anonymous, supported the launch of a brand-new ranger team in Mosiro. This support will ensure that we can launch this new team to increase protection by the second quarter of 2023. This will be our ninth ranger team, a big accomplishment for us. We were also humbled to receive a significant gift from the estate of animal lover, Lucy Byrd Pegau, whose conservation legacy continues by supporting MEP's work. The Marianne Halle Animal Support Foundation, Ann & Gordon Getty Foundation and Leslie L Alexander Foundation have all been long-time supporters of MEP, and we're extremely grateful for their year-end support. The Allen Institute for Artificial Intelligence continues their long-term support of MEP's Research Department by supporting a developer in Kenya dedicated to advancing MEP's conservation



technologies. We're extremely grateful for major donors Carl Haefling, Tom Heyman, The Schumacher Family Fund, Mallory Hathaway, the Hahn Reddy Giving Fund and Lori Price. We also received a grant from Elephant Cooperation, who supported our drone training in 2022 and the purchase of phones to operate drones in conservation. They are a long-standing partner that we're grateful to have supporting our conservation efforts.

Thank you to donors for ending the year with a record amount raised including Helen Andres, Joe & Chiara O'Brien, Caren Chappell, The Amy & Bart Peterson Foundation, Edith MacGuire Charitable Trust, The Moran Family Foundation, Dawn Schiff, Richard Urell, Robert Stephen, Margaretta Taylor, Arthur Walters, the Pepper Family, Sy Blechman, The Carol J Adragna Family Foundation, Marcia Donley, Irving Jacobson, Kathleen McCarthy, John Cedarholm, Glenn Cook, G Cutter, Margaret Oyama, Patricia Studer, Michael Wagner, Anne Martin, Fine Family Fund, Nikhil R Jaisinhghani, Birgit Henninger, Christy G Monroe, Piacentini Fund, William J Boyle, Wales Family Fund, Daniel Labar, Connie Ode, Sandra Muscillo, Linda Merrill, Joselow Foundation, Lucia Charitable Fund, The Tom Fund, Pierre Schlemel, Nancy Krenzel, Richard Morris, Lisa Witherbee, Sharon Miles, Ardelle Bellman, Jo Anne & Nick Rutigliano, Surendra Gupta, Kathleen Hamilton, Carol Kauffman, Lorraine Odasso, Brian Lewis, Peter Abbrecht, Shandra Belknap, Barbara Berman, Francine Bernard, Curtis Collins, Judith Cook, Pam Day, Anthony Gramer, Robert Hamm, Sarah Harkinson, Alicia Hlywak, Frieda Holt, Richard Litkenhaus, Barbara Magin, Gilbert Meehan, Dorothea Nell, Rhonda Paxton, Myrta Pulliam, Caryl Rine, Mary Roche and Wesley Umeda. We also received many matching donations from organizations like Spotify, State Farm, and more.

Finally, we can't end December without thanking artist Leslie Cline and Thanksgiving Coffee Company. Leslie graciously donated her elephant artwork for our holiday note card promotion and Thanksgiving Coffee Company gave away free bags of Protect Our Elephants coffee to major donors. We're so grateful for their support.



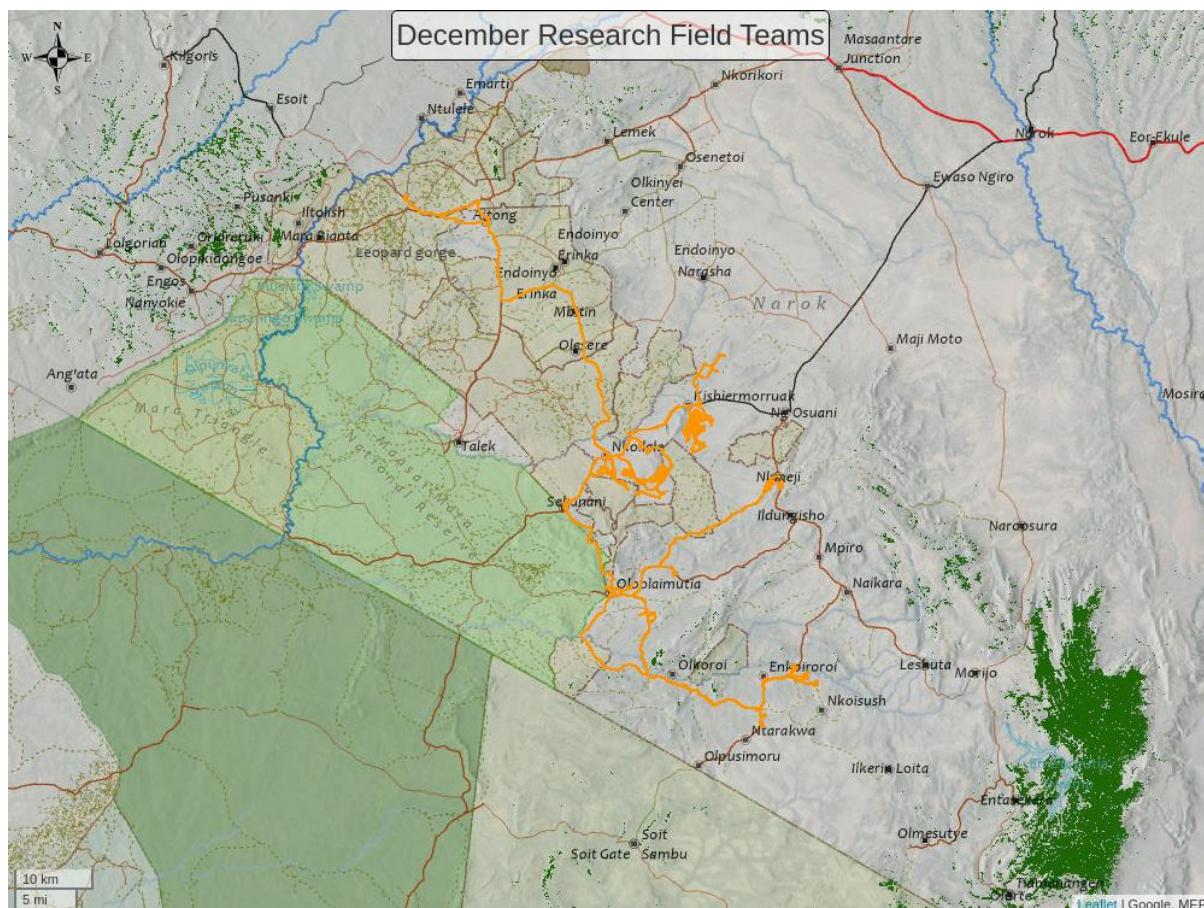
## RESEARCH & CONSERVATION

### Director's Update

The Mara continued its trend of high rainfall in December and the end of the month was especially wet. Cattle numbers continued to be high, and many livestock are purported to have been brought to the Mara from other regions given the high-quality grazing and the relative drought being experienced in other areas.

Our Ecoscope team made progress in adopting a new 'EarthRanger Client' to interface with the EarthRanger API to be able to more efficiently download event and tracking data.

Our monitoring framework team also compiled the results of the November workshop held in Narok and submitted an interim report to Malisili who is helping to fund development of the framework. The development of a monitoring framework for the Mara will help to connect data and analyses being conducted by a variety of organizations to managers and policy makers, making it easier to base decisions on sound science. The next workshop is set for Feb 7/8<sup>th</sup> in Narok. I took leave in December and worked on converting my Canadian pilot's license to Kenya with the hope of expanding MEP's aerial monitoring capacity in 2023.



Movements (orange tracks) of MEP's two field assistants during December. All of our field assistants are working on mapping fences, roads and landcover ground-truthing points using motorbikes and our TerraChart app. They recorded 102 km of fences and 32 LCC points in December.

## MEP Co-Existence Farm

### General Update

In the month of December, we experienced both heavy rainfall and sunny days, we also had elephants visit and they were able to get across the ditch to raid the maize. Due to the rain, the ditch walls have been falling making it less of an obstacle, which meant the elephants took full advantage of it to get to the maize on the other side.

Some exciting news for December is that the farm started a medicinal garden with over ten crops already planted. We've also received apothecary heirloom seeds this month to cultivate in the garden with the focus on preserving the cultural knowledge of using indigenous herbs in the Mara for healing.



**Experimental Farm SITREP: December 2022**

Date Time	Plot Id	Type of Crop	Details
2022_12_04	3-6.1	Lemon Grass	The tips of all the crops have been eaten by hippos
	5-10.1		
	10-1.1		
2022_12_04	6-3.1	Potatoes	Hippos have eaten and stepped on the two potatoes plots
	7-12.1		
2022_12_04	11-12.1	Sunflower	Different birds eat all the seeds of the sunflower crop
2022_12_11	1-5.1	Chili	A total of 15.3kgs of fresh chili was harvested in the four plots, most of the crops are drying up after yielding for a whole year
	7-3.1		
	8-7.1		
	10-11.1		
2022_12_11	3-8.1	Peppermint	Hippos predated on one plot of peppermint severely eating almost all crops
2022_12_18	1-1.2	Citriodora	Elephant passed through this plot one tree was brushed and it fell
2022_12_18	4-7.1	Managu	All the leaves of the Managu crop and few stalks were eaten by hippo in this plot
2022_12_18	8-5.2	Canola	Elephant passed through the plot and stepped on the crops that were germinating
2022_12_18	11-12.1	Sunflower	All the seeds in this plot were eaten by birds hence zero yield
2022_12_18	S2-1-4.1	Maize/Ditch	Elephant jumped over the ditch through the fallen walls and eat all the maize that were maturing
2022_12_18	1-12.1	Garlic	All have been replanted for the fifth time
	4-3.1		
	6-11.1		
	8-6.1		
	11-2.1		
2022_12_18	10-14.1	Okra	All has been replanted for the 5th time after a few was harvested and the rest didn't have good yield
	9-9.1		
	1-13.1		
	10-14.1		
	4-2.1		
2022_12_18	4-6.1	Peas	Due to poor growth this plot was replanted
2022_12_23	11-1.2	Canola	All the plots were replanted after they were predated on, they have been replanted for the 3rd time
	9-12.2		
	1-7.1		
	6-2.1		
2022_12_23	3-10.1	Sunflower	Sunflower was replanted in this plot
2022_12_23	S2-1-3.1	Maize/Sunflower/Cover crop	All the maize in these plots were replanted
	S2-1-5.1	Maize/Chili/intercrop	
	S2-1-6.1	Maize/Sunflower/intercrop	

2022_12_23	3-6.1	Lemon Grass	Hippos totally destroyed the crop found in this plot
	S2-1-2.1	Maize/Chili/intercrop	All Maize that was replanted was eaten by helmeted guinea fowl, uprooting before they could germinate
	S2-1-3.1	Maize/Sunflower/Covercrop	
	S2-1-3.1	Maize/Ditch	
	S2-1-5.1	Maize/Chili/intercrop	
2022_12_31	S2-1-6.1	Maize/Sunflower/intercrop	



*These are the few crops that had zero predation this year: Lavender, citriodora, rosemary, chili, tea tree, geranium and onion.*



*In December, peppermint, lemongrass and sunflowers were predated by hippos and birds respectively.*



*Here is the maize surrounded by the falling ditch, as mentioned previously. The photos show the before and after it was predated by elephants.*

## Climate Report

**Table 2: 1 MEP's Experimental Farm Rainfall Recording December 2022**

Date	Rain gauge 1	Rain gauge 2
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2022_12_10	2.5	1.9
2022_12_11	5	3.2
2022_12_21	20	14
2022_12_25	14	9
2022_12_27	7.5	5

### Tracking Manager Report

On December 14, the Mara Elephant Project mobile ranger team responded to two collared elephants, Chelsea and Kiambi, and a herd of 37 inside fences in a community area. They successfully pushed the herd out of the community's land and into the nearby safety of a conservancy.



The MEP "Golf" ranger unit monitored Fitz and his herd of 70 in the Nyakweri Forest.



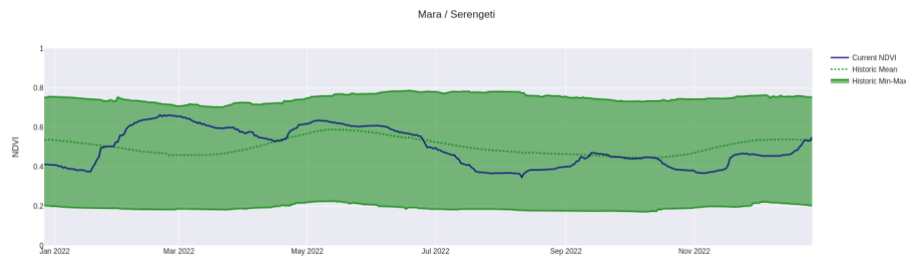
The MEP "Kilo" ranger team, the newest recruits to MEP and the third team deployed in the Loita area to increase protection for elephants and communities. On December 30, the team responded to collared elephants Indy and Natasha that were part of a herd nearing a settlement. They were able to push them away preventing any damage to crops, infrastructure and keeping the community safe.



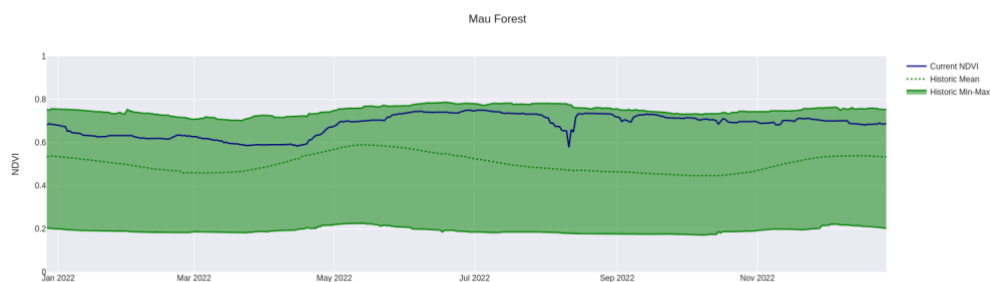
## ENVIRONMENT: NDVI

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 shaded area shows the min-max range of values centered around the green trend line from values measured back to February 2000.

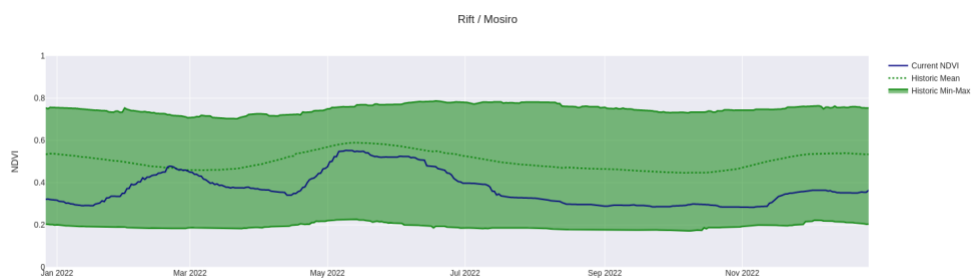
### Greater Mara Ecosystem (GME)



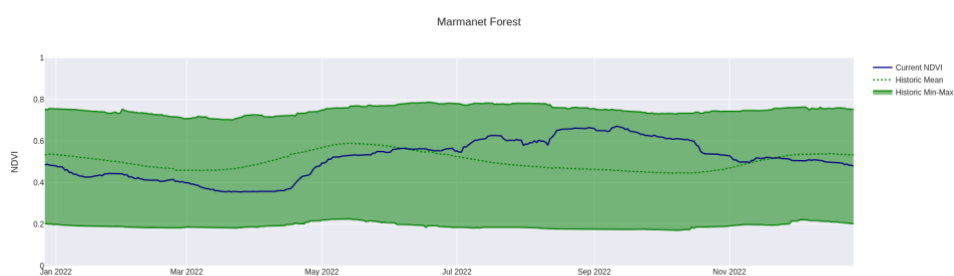
### Mau Forest



### Rift Valley / Mosiro



### Marmaret Forest





## Nyakweri Forest

