MEP December 2024 Report

In December, collared elephant Fitz and his herd welcomed a brand-new member just hours before the MEP rangers deployed their drone to monitor the calf.

GENERAL

This year was worth celebrating as Mara Elephant Project gathered employees and stakeholders in December to officially christen our new office in the Mara. 2024 tested us, but we're proud of the team's integrity and grit when faced with adversity and made sure to celebrate the accomplishments of our brave men and women working to protect elephants and communities in the Mara. MEP Deputy Chair Kevin Rodrigues and Advisory Committee members Loic Amado, Valery Super and Teddy Kinyanjui were on hand to help the CEO announce promotions and bonuses for a job well done. The ribbon cutting on our new office was a symbol for everyone at MEP that change is inevitable and not all bad; a sentiment worth celebrating.

"To all our donors and supporters who have contributed to our success in 2024, we extend our heartfelt gratitude. Your generosity makes everything possible, thank you!" *Special Projects Manager Wilson Sairowua*

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SECURITY, ANTI-POACHING & CONFLICT

In December, MEP rangers, researchers and supporting staff participated in a two-day Fire Safety training conducted by Kaileys Safety Health Environment Consortium. The purpose of the training was to introduce the MEP staff on understanding more about fires, their causes, risk assessment, and types of fires in order to prevent any fire incidences that might occur at the workplace in their areas of operation. The MEP team is now well versed with skills to handle any fire emergencies, basic first aid procedures, emergency action plans, and preventing fire deaths and injuries in the workplace.

In October, MEP collared a large bull elephant, now affectionately name "Kevin" after Trustee Kevin Rodrigues, in Mara North Conservancy. Just a month after his collaring, Kevin entered the Serengeti crossing into Tanzania through the Mara Triangle. He joins other transboundary bull elephants the Kenya Wildlife Service (KWS), Wildlife Research and Training Institute (WRTI) and MEP track to increase their protection and gain vital insights into behavior, migratory patterns and the challenges they face in an ever-changing landscape.

In December, three bull elephants in the Rumuruti Forest Reserve were breaking through fences and moving into farms putting themselves and the bordering communities in danger. KWS rangers on the ground tirelessly responded, but more drastic measures were needed to keep everyone safe. MEP responded to the emergency request from KWS and worked with their capture unit to translocate the bulls to Tsavo West National Park and deployed collars to track their movements. Over the multi-day operation, CEO Marc Goss flew the MEP helicopter to support the ground team and after careful coordination, all three bulls were successfully moved over 460 km (286 miles) away to their new home. Their continuous tracking will support KWS and the WRTI's efforts to reduce conflict and

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better understand whether the bull's crop raiding motivation was opportunistic or intentional. They've now joined another collared bull elephant, Tino, in his home range, who is thriving and experiences little conflict all in hopes of promoting coexistence.

On December 10, the MEP helicopter was deployed to assist the Sheldrick Wildlife Trust (SWT) Mobile Vet Unit and the South Rift Association of Land Owners (SORALO) to treat a bull elephant suffering from a poisoned arrow wound in the Shompole area. Spotted with a severe limp, this bull needed immediate intervention. The MEP helicopter carrying KWS Vet Dr. Njoroge helped the team dart and guide the bull into position for his treatment. Thanks to everyone's rapid response, the arrowhead was successfully removed, and the wound disinfected. The SORALO ground team will continue to monitor the bull's recovery.

On December 23, MEP rangers got a report about an injured elephant. The team immediately called in our partner KWS Vet Dr. Njoroge from the SWT Mobile Vet Unit to treat the bull elephant for an arrow wound on both its right and left hind limbs. The bull, identified as individual 58 in the MEP ElephantBook database will continue to be closely monitored by MEP rangers until he fully recovers. It takes all hands-on deck for elephants to survive as they navigate an ever increasingly complex landscape.

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Overall, in December, MEP rangers alongside government partners arrested five habitat destruction suspects and removed a total of 67 snares. They also confiscated 38 pieces of timber, 351 posts, destroyed 14 charcoal kilns, and mitigated nine conflict incidents. In December, MEP rangers covered a distance of 2,614.18 km on foot and 13, 720.34 km in a vehicle in the GME.

HELICOPTER

Originally collared in 2021, Indy and her herd's movements have been tracked through an area plagued by high levels of human-elephant conflict. Thanks to support from the Indianapolis Zoological Society, over the past three years, data from her collar has informed Mara Elephant Project ranger patrols and provided valuable insights to the Kenya Wildlife Service (KWS) and the Wildlife Research and Training Institute about elephant movement patterns in this challenging landscape. Indy's family herd, which includes her young calf, often merges with other groups led by collared elephants Natasha, Clara, and Audrey. Together, they form a "mega herd" of over 100 individuals, demonstrating the complex social dynamics of elephants in the region. To ensure continued monitoring, MEP and KWS veterinarian Dr. Njoroge successfully re-collared Indy on December 23. The updated tracking device will allow researchers to monitor her movements 24/7 for another three years, further contributing to conservation efforts and human-wildlife coexistence strategies.

DRONES FOR CONSERVATION
Special Projects Manager's Update

December was a busy month, with the drone pilots responding to escalating human-elephant conflict incidents in the Mara. During this period, there was an increase in elephant-related incidents, particularly with elephants breaking fences around farms in Naretoi and extending to Pardamat Conservancy. The MEP HQ team responded to incidents of elephants breaking the electric fence at Naretoi Estate in Enoonkishu.

The MEP "Golf" ranger Team conducted daily patrols, focusing specifically on a particular herd near Partakila. Numerous reports of human-elephant conflicts near Kawai required daily responses to minimize crop damage and reduce tensions within the community living around the forest. The "Bravo", "Kilo", and "Echo" ranger teams in Loita encountered fewer conflicts compared to previous months. Their efforts shifted to monitoring the Loita Forest for signs of

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habitat destruction, including illegal logging and charcoal production. Drones provided crucial insights into inaccessible areas, enabling early detection of potential threats.

The Mara Elephant Project / SWT Mau De-Snaring Unit teams monitored the Mau Forest and responded to incidents of elephants entering maize and tea farms. The teams have been handling fewer cases of elephants coming out of the forest recently while the Mosiro Team continued using drones for monitoring along the Rift Valley and visiting collared elephants. With a reduction in elephant conflicts in the area, they focused on routine monitoring activities.

Both the "Foxtrot" and mobile ranger teams were busy in December responding to conflicts and pushing elephants away from settlements. The teams also monitored collared elephants roaming within the conservancies noting good health and the collars in proper condition. Also, in December, we continued the exercise of cattle counts in Mara North and the neighboring community in Mararianta. So far, we have successfully photographed more than 40 bomas.

COMMUNICATIONS & FUNDRAISING

The 2024 Giving Season was one of the best in organizational history. THANK YOU! Mara Elephant Project USA received $866,899.93 in support. Thank you to the Matt & Mari Foundation, Mallory Hathaway and David Stulb for leading the MEP herd during Giving Season. Additional thanks to Mary Takaichi, Daniel Labar, Keith & Nancy Miller, Christy Monroe, Pierre Schlemel, the Schumacher Family, Kathi Cover, the Trauscht Family, the Amy and Bart Peterson Foundation, the Max and Victoria Dreyfus Foundation, The Griffin Phoenix Foundation, Robert Hamm, Richard & Karen Ruge, Robert and Dawn Schiff, Seymour Blechman, Margaret Oyama, Craig Buxton & Linda Neuhauser, the Burt Family Foundation, The Pillsbury Family Foundation, the Bryan Foertsch Family Foundation, the Pepper Family, Devon Guard, Carol Kauffman, Terrance Joseph Kaeser, Edith MacGuire, Joseph and Velda Boenitz, Elizabeth Hyatt, the Betty Millard Foundation, Richard and Pamela Hinds, Ronald Harris, Jeffrey Stephen Kiser, the Joselow Foundation, Darren Magda, Eve Anderson, Ginni Keith, Patricia Mary Panaia, John Hufty, Maria Roberts, Tammy Allyn, Zep Tepi, the John A Rodger Jr Foundation, Susan Ludwigsen, Sylvia Johnson, Gaylord Ingersoll, Carl Haefling, Craig Knight, Betsy Searle, Drew Mackay, Gloria Zavala, Lynn Jacobson, Denise Ambuske, Barbara Magin, Tracy MacEachern, Betsy Searle, Jack Bleck, Ana Goni Boracco, Steve Casey, William Radinson, Anna Rentz, Margaret and Michael McCormick, Steven Ashelin, Cami Yehling, Kari Schnapp, Pamela Whitehouse, Earnest Smith, Kathleen Peto, Mary Love, Timothy Conley, Marcia Donley, Nancy Glahn, Nancy Munn, Theresa Cederholm, Joan Denton, Dudley Diebold, Kathleen McCarthy, Richard Urell, Joan Ballitch, Irving Jacobson, Michael Romersa, Fran Wolf, Edward Brent, Sandra Atlas Bass, Judith Cook, G Cutter, Harriet Karkut, Richard Litkenhaus, Jonathan Meyer, Betty Parker, Patricia Studer, Michael Wagner, Josephine Wardle, Rhonda Paxton, Nelson Schaenen, Dona Vasey, Vickey Reaves Barwick, Audrey Steichen, Jacqueline Allaman, the Carol J. Andragna Foundation, Gloria Baldwin, Tracy Cermack, Patricia Clark, Joy

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Davenport, Judith Dillon, Joan Gorner, Gregory Grinder, Cherly Hewitt, Margaret Hoburg, Edward Kaplan, Raymond James, Jeremy Lang & Lynn Stern, Mary McPhie, Hans Mosimann, Michael Passet, Lili Pearson, Virginia Perez, Dolores Proubasta, Myrta Pulliam, Hemalatha Sabapathy, Sandra Schwartz, Hedy Simmons, Stephen Strunk, Debra Swanson, Pacita Tan, Mary Weisberg, Karen Wiggins, Sharyn Manis, Lorraine Odasso, Florence Edgar, and Lawrence Fahn for your support. MEP also received two generous estate gifts from the estate of Billie Harrison and Karen Lindemann. Thank you for leaving a legacy that supports elephant conservation.

Mara Elephant Project Trust in Kenya received $13,232 in donations in the month of December. Thank you to the Basecamp Explorer Foundation Kenya, Dianne Mrak, Sabine Dohle, Marjorie Mountford, Foreningen Forsvara Elefanterna, Martha Swartz, Naretoi Holdings, Nancy Munn and Denny Osborne for your support.

RESEARCH & CONSERVATION

Deputy Director's Update

In December 2024, key achievements included the successful setup of EarthRanger accounts for Mara Ripoi, Olchoro and Nashulai conservancies under the USAID/MMWCA Conservation of Maasai Mara Landscape (CMML) project. The team also conducted EarthRanger reviews and event configurations at Olare Motorogi and Pardamat conservancies. Wildlife monitoring efforts saw the re-collaring of elephant Indy to enhance continuous tracking and protection.

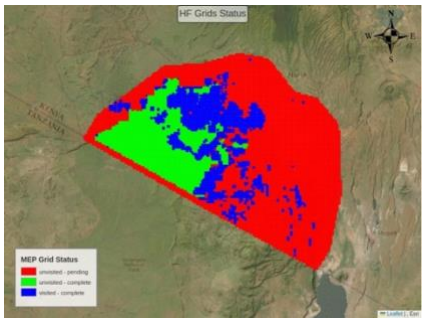
Long-Term Monitoring (LTM) Team

Research interns reported on the onset of December, joining the long-term monitoring (LTM) team on a two-day fire marshal training held at MEP headquarters. The team also conducted a field visit to Mosiro, one of our vital connectivity routes and home range for our collared subjects Hannibal and Indy. The team deployed a drone to monitor elephants in this area sighting Hannibal and his group in one of the patrols. Distance survey exercises took part later in the month of December beginning with the Mara triangle transect and they finalised with Mara North and Lemek/Olchoro transects respectively. The team also conducted 5 sightings consisting of 3 bulls, 9 cows, 12 sub-adults and 2 calves, and no new individuals were recorded during this period.

The team assisting with the treatment of individual 58 for an arrow wound in Mara North Conservancy.

Data and Reporting Team

Five grids were completed in the month of December and MEP's field assistant marked a significant number of roads and physical features. The month's data is summarised in the image below.



Geospatial Mapping for December.

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MEP Co-Existence Farm

General Update

The month of December brought significant rainfall which was beneficial for both our daily farm operations and to the local communities. Zero crop raiding incidents were observed throughout the month with hippopotamus activity in close proximity to the main five plots recorded.

As part of our 2025 program objectives which entails working together with the out-grower's farmers, we will partner with teams that are already working as self-help groups to plant non-palatable crops as well as train them on basic entrepreneurial skills to reduce dependence on wildlife palatable crops. We also aim to improve community livelihoods while mitigating the high cases of human elephant conflict.

Our team held successful meetings with self-help groups and opinion leaders from the key operational areas alongside the Mara River which is a high human-wildlife conflict hotspot zone. The areas include; Olekoros, Emarti, Enkutoto, Oloonkoliin and Oloisukut. We used this opportunity to request to work alongside them in their farms and they responded positively and were willing to be included as they suggested different ways we could approach the group formation and how they will handle the project going forward.

In the subsequent weeks, out-growing awareness activities organized by Mara Elephant Project coexistence farm team were undertaken with the selected self-help groups across their areas of residence. The groups included; Naisulu with 15 participants, Olosesia women group with 10 participants and Mepukori CBO with 14 participants. The groups asked various questions, and visited the Coexistence Demo Farm to learn more about the non-palatable crops as they plan to undertake the same project in their own farms in 2025 with the guidance from MEP.

Climate Report

Table 2: 1 MEP's Experimental Farm Rainfall Recording December 2024

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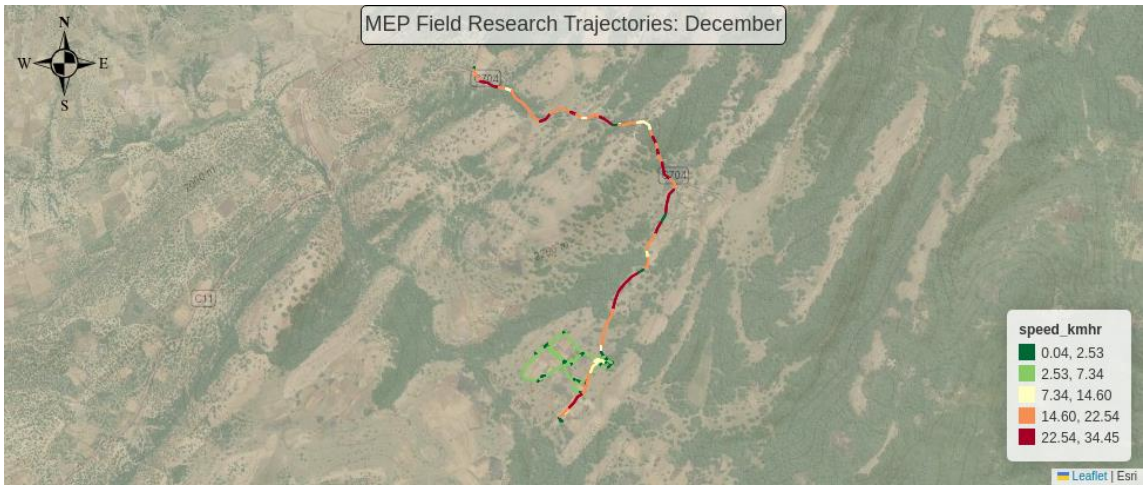
Figure 1,2&3: Citriodora, Chili, Rosemary plots doing well.

Date	Rain gauge 2(200m2)
2024_12_02	10
2024_12_03	13.5
2024_12_04	6
2024_12_05	8
2024_12_06	4
2024_12_07	4
2024_12_08	7.5
2024_12_09	7.6
2024_12_16	3.2
2024_12_18	0.4
2024_12_20	4.5
2024_12_25	2.5



Movement of MEP's one field assistant in December. Our field assistant is working on mapping fences, roads, and landcover ground-truthing points using a motorbike and our TerraChart app. He covered a total of 27.04 km and recorded 10.68 km of fences and 0 LCC points in December.

Tracking Manager Report

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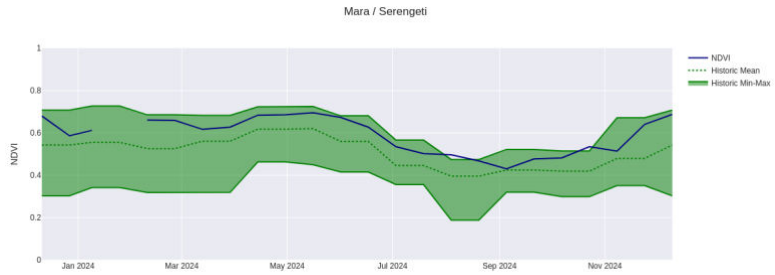
Fitz, Hannibal, Indy, Polaris, Matali, Richard, Brian, and Lempiris all monitored by MEP rangers in the month of December.

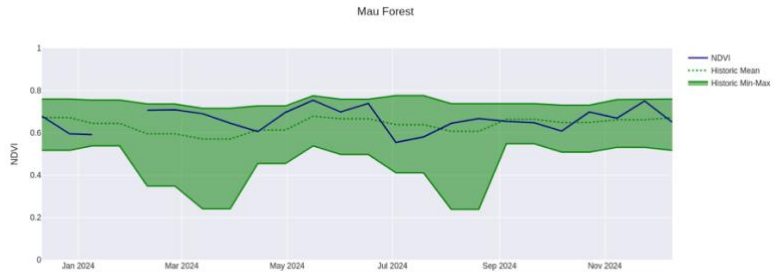
ENVIRONMENT: NDVI

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



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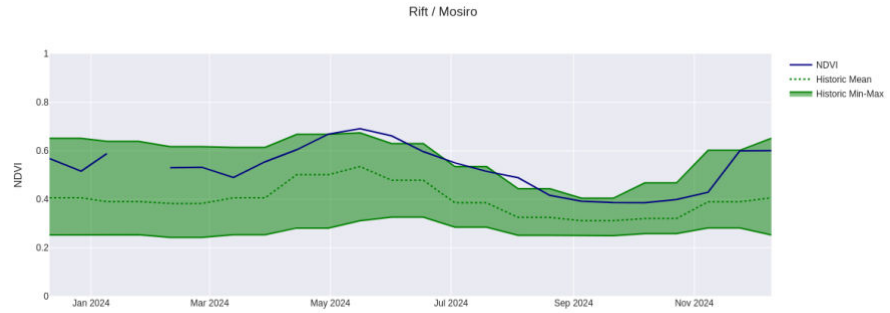
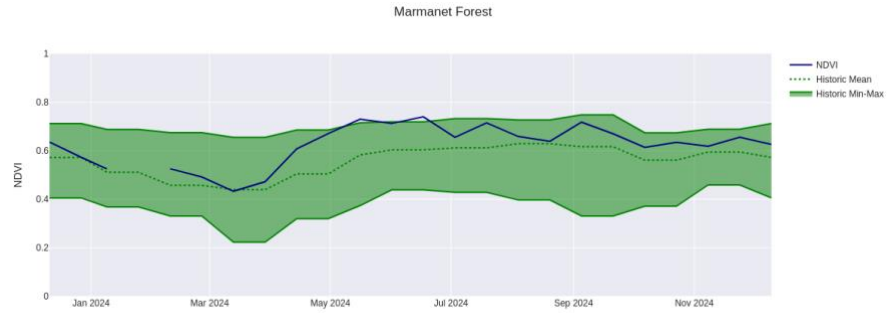
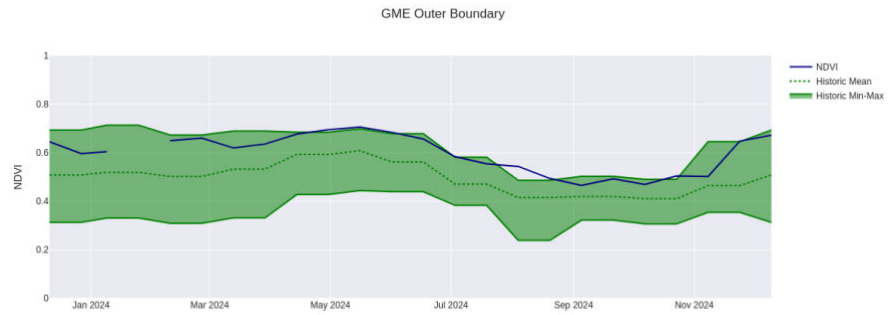
Rift Valley / Mosiro



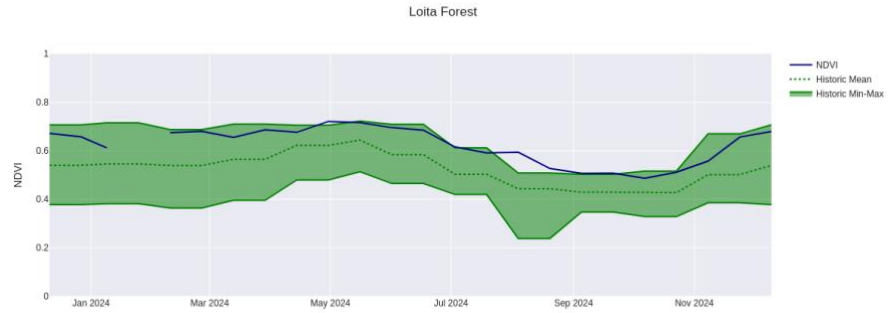
Marmanet Forest



Nyakweri Forest



Loita Forest



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