ENARAU CONSERVANCY ANNUAL REPORT

2024

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ENARAU CONSERVANCY

MAASAI MARA

Research, Restore, Conserve

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1.0 Introduction

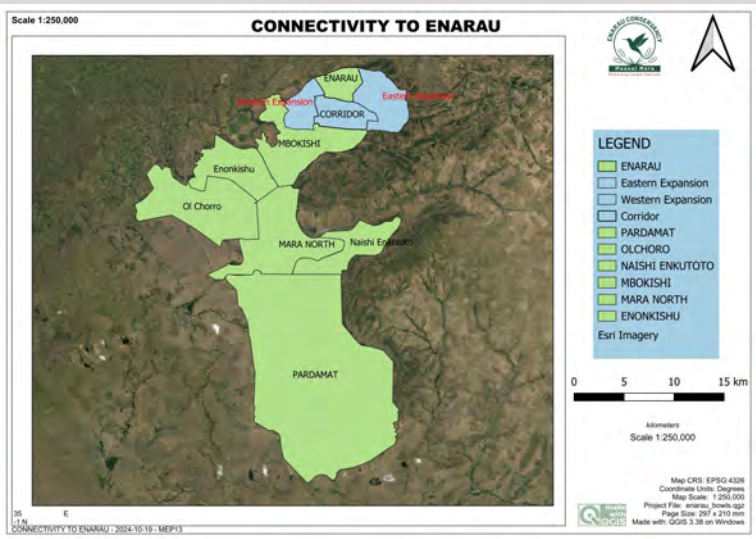
The idea of Enarau Conservancy was started in 2021 after Mokona Nabaala and his son, Harrison Nabaala were introduced to Neil Anthony, who had been working in the Mara landscape for several years, but wanted to have more of an impact by supporting a conservancy which based its decisions on the restoration of land for conservation. Harrison Nabaala and Neil Anthony were involved in the founding of the Centre for Ecosystem Restoration– Kenya, (CERK) where Harrison serves as the Savanna Hub manager.

The conservancy was established in August 2022 with 336 acres belonging to Mokona Nabaala. This land was previously leased for farming, serving as an ideal canvas to test restoration techniques and monitoring protocols that had already been piloted at Maa Trust's Headquarters, but at a larger scale. An objective of Enarau Conservancy is to expand its reach and eventually grow to become a connected part of the Greater Mara Ecosystem.

As the northernmost conservancy in the Maasai Mara Ecosystem, Enarau is adjacent to Mbokishi Mara Conservation Area. Its main aim is to create more space for wildlife conservation, restore degraded farmland, protect unique threatened habitats and protect existing vegetation. The methods from which these goals are accomplished are through research, restorative conservation, and community wellbeing.

Currently, the conservancy has secured 3140 acres of land with the potential to secure 6860 acres by 2030 including a critical wildlife corridor linking to Mbokishi and extending eastward beyond the current boundaries. Twenty-four members of the community are employed by Enarau, which also supports eleven landowners with 41 beneficiaries receiving lease payments to secure their land for restorative conservation activities.

Mokona Nabaala and Neil Anthony, founding members



Majority of Enarau Conservancy employees with the founders, Mokona Nabaala and Neil Anthony.

2.0 2024 Impact

1196
Livelihoods supported

- 24 employees supporting 120 dependents
- 1000+ community members receiving benefit from conservation
- 11 landowners with 41 beneficiary households receiving leases

6593
km patrolled

- Rangers tracked 6593 km of patrols in 2024.
- Within the conservancy, patrols are on foot
- Community assistance outside the conservancy utilized motorbikes

160
Research plots established

- Acoustic recorders facilitate effective monitoring of birds, bats, insects and reptiles'
- Land Degradation Surveillance Framework (LDSF) conducted to monitor vegetation
- Soil samples collected

4123
Seedlings germinated

- 105 trees planted near Enarau HQ and research quarters
- Pupils planted 117 trees at two schools
- 22 indigenous species grown in tree nursery
- 4123 seedlings germinated in the tree nursery

10,000
L water tank installed

- Restoration of Kipukeri Spring, providing water to tree nursery and the community
- 20 households provided with safe drinking water

Wifi

- Satellite wi-fi installed, easing communications

830
Livestock supported per month

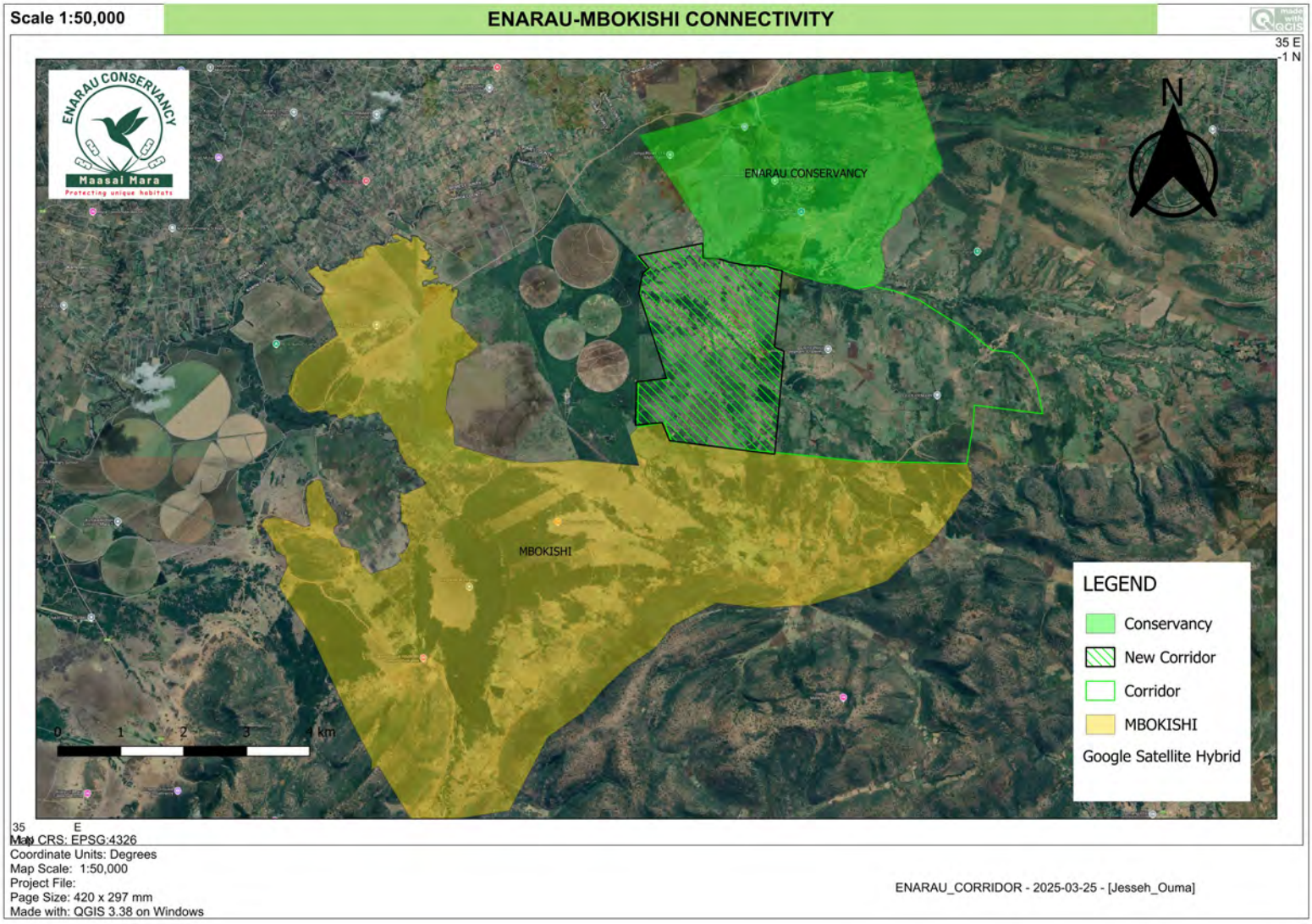
- Average number of cows supported by Enarau Conservancy each month
- Herd is used to enrich ecosystem rather than degrading it by rotating between 4 grazing blocks

11
Trainings attended

- Valuable governance trainings focused on wildlife policies, accounting, HR, sustainable rangeland management strengthened the capacitly of Enarau employees
- Ranger refresher course enabled rangers to hone their skills.

6
Beds

- Research unit constructed to house 6 more beds,
- Expanded total occupancy of the research camp to 16



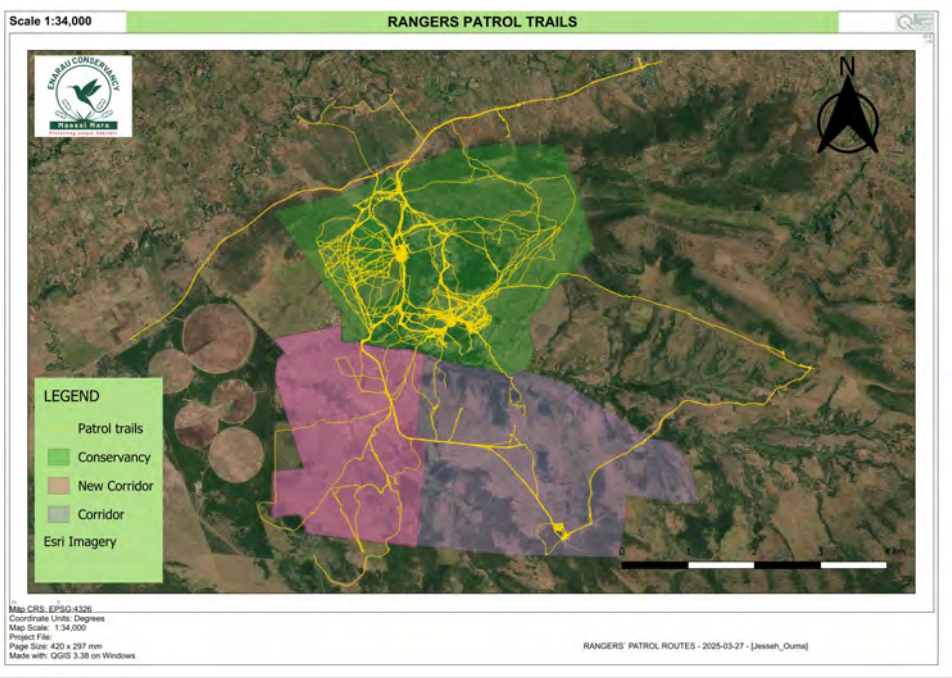
3.0 Restorative Conservation

3.1 Expanding boundaries

Because of Enarau's location as the northernmost conservancy in the Mara ecosystem, it has the unique opportunity and the responsibility to expand, benefiting additional landowners and expanding wildlife habitat within the Greater Mara ecosystem. Kenyan conservancies, particularly in the Mara, are developed by paying landowners a lease for the land to limit development, overgrazing, and illegal activities, thereby conserving the land for wildlife habitat. In 2023, Enarau leased 2140 acres belonging to one landowner, but in 2024, Enarau expanded its area to 3140 acres, belonging to ten landowners. The strategic expansion connects Enarau to the rest of the Mara conservancies, namely Mbokishi Mara Conservation Area.

Conservancy management has been busy sensitizing the remaining area of the corridor resulting in enthusiastic landowners of 6860 acres who are ready to commit to Enarau's cause as soon as funding is available. Growth of Enarau means more beneficiaries and converts to join the conservation cause.

Enarau corridor connecting to Mbokishi Conservation Area.



Event classification	2023	2024
Illegal grazing	0	13
Charcoal harvesting	1	3
Logging	8	30
Human-wildlife conflict	2	7
Livestock predated	5	5
Livestock injuries	1	2
Snares	4	0

3.2 Protection of wildlife habitat

Throughout 2024, Enarau's ranger team patrolled 6593 km on motorbike and foot within and in the surrounding communities of the conservancy. While on patrol, rangers record all observations of wildlife species including mainly zebra, impala, wildebeest, giraffe, and elephant. The rangers use Earth Ranger to record all data, including instances of illegal activity. Rangers attended refresher training at Ol Chorro Conservancy in October 2024.

The conservancy added two armed KWS rangers to assist with managing illegal activities within and beyond its boundaries. Within Enarau, illegal activities have dropped, although the rangers still patrol beyond their borders and alert authorities within Kenya Wildlife Service to expand their reach. Events recorded on Earth Ranger conclude that the ranger force was engaged in halting illegal grazing and illegal logging more than in the previous year of operation.

Wildlife commonly seen in Enarau: Commmon impala, Kirk's dik-dik, Common zebra, and African elephant

3.3 Tree nursery

Enarau's tree nursery was upgraded in 2024 with a learning center built where the planters can share their insights with visiting groups. Two school groups visited the nursery in 2024 and were given 117 seedlings to plant around their schools. During the National Tree Planting Day and World Environment day, conservancy staff planted 105 seedlings around the conservancy headquarters.

The nursery attendants have discovered that certain species such as *Balanites*, *Rhamnus*, and certain *Acacia* species do not germinate well in the seed beds. This could be due to a long state of dormancy and the planters are still experimenting with how to adjust the seedbeds to fit their needs. There were 4123 seedlings from 22 species in the nursery at the end of the year.

Animal Survival International in partnership with Seedballs Kenya also donated seedballs to distribute at Enarau Conservancy in 2024.

3.4 Regenerative grazing

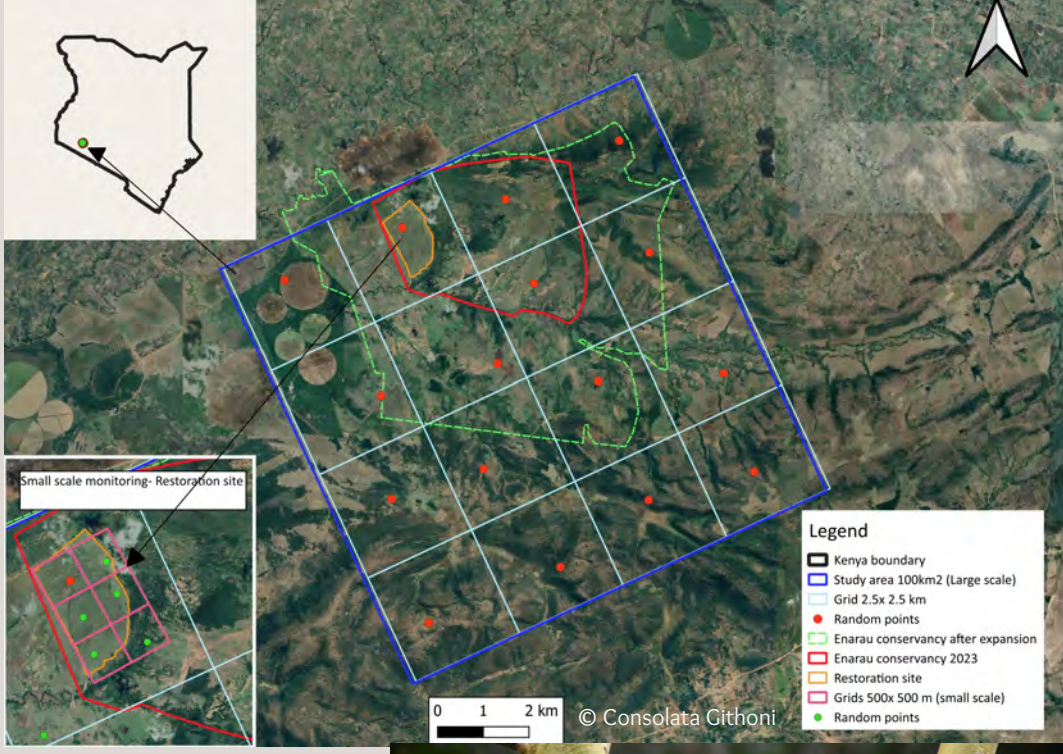
The conservancy herd at Enarau has grown to 830 cattle which graze four grazing blocks in rotation to ensure they are being used as a catalyst to grow healthier rangelands. This is an increase from the number of cattle grazing in the conservancy, as better management has allowed better resources for the cattle to graze. Although the addition of land into the corridor in 2024 brought in more cattle owners, they have not yet integrated their livestock into the conservancy's grazing plan.

4.0 Research

4.1 Research plots

Nottingham Trent University, CERK

A PhD student, Consolata Gathoni, has established 160 research plots extending beyond the boundaries of Enarau Conservancy. These plots are targeted to collect as much ecological data as possible. Thus far, Ms. Gathoni has deployed acoustic recorders to monitor birds, bats and reptiles. The research team has further conducted the Land Degradation Surveillance Framework (LDSF) methodology which investigates grass, tree, and shrub biodiversity and density and a structured approach to soil analysis. Future endeavors are to deploy camera traps, soil temperature and moisture probes, and pitfall traps to assess the biodiversity of herpetofauna and entomological species to assess ecological variation and how it corresponds to variations in flora and fauna.



4.2 Long-term data collection to evaluate ecosystem change

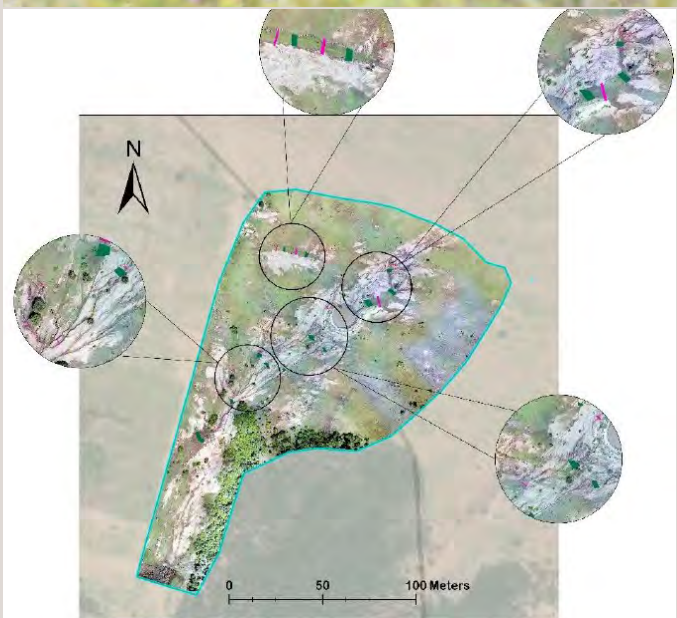
Smithsonian National Zoo and Conservation Biology Institute

The conservancy has joined a collaborative effort to monitor wildlife and livestock densities in response to vegetation dynamics, using high-resolution imagery and ground-truthing techniques. Six transects have been identified within the conservancy where quarterly wildlife distance estimation surveys will be conducted in a coordinated effort to estimate wildlife densities across the Mara Conservancies. The first coordinated transect period included Enarau, Pardamat, and Naboisho and was conducted in November 2024. The team at Smithsonian is developing a model and dashboard to provide near real-time estimates of livestock and wildlife. In addition, soil samples have been collected from these sites, contributing to a global effort to monitor soil health in various ecosystems. Soil sampling will be repeated every 5 years.

4.3 Erosion assessment

Wageningen, CERK

An intern used a drone to capture high resolution images of Kooruti plains, which has been severely degraded by unmanaged grazing and heavy rainfall. The 3D images were used to identify the most severe gullys that would most benefit from interventions to thwart erosion.



4.4 Land Degradation Surveillance Framework (LDSF)

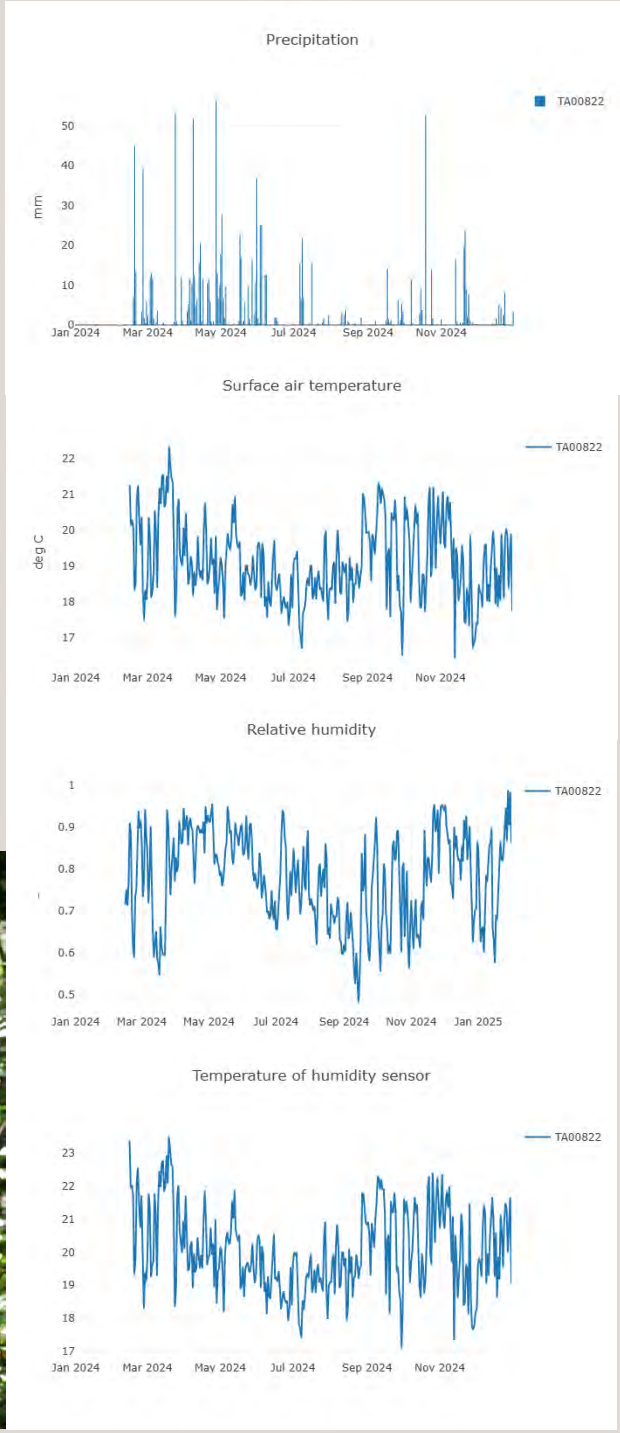
One Mara Carbon Project

In September 2024, a team from One Mara Carbon Project (OMCP) spent two days in Enarau assessing the diversity and density of grass, shrubs, and trees. The team also collected soil samples and soil infiltration data, which will be analyzed for soil organic carbon along with samples from across 17 Mara conservancies. This is the first conservancy wide survey which will inform the OMCP on carbon credits and distribution across the landscape.

4.5 TAHMO climate data

One Mara Carbon Project, Give Power, MMWCA

In early 2024, Give Power, OMCP, and MMWCA collaboratively installed a TAHMO weather station and wifi network at Enarau. The data is managed on Earth Ranger but is accessible for conservancies to assess changes in the climate and how it could affect grass availability for livestock and wildlife. Enarau received the highest rainfall toward the end of March 2024 and the month with the most precipitation was May 2024.



4.6 Baseline woodland assessment

The conservancy secured land parcels along the first phase of the corridor expansion to establish connectivity to Mbokishi Conservation Area. Much of this land is forested and is expected to provide habitat to various fauna now that the habitat has been secured. Therefore, a baseline survey of tree and shrub species was conducted along this area. Twenty-eight species were identified, while the corridor was dominated by Orange leaf croton (*Croton dichogamus*).

4.7 Camera trap deployment

Camera traps have been utilized in Enarau to capture elusive and nocturnal species. Two grids have been established and a limited number of camera traps are deployed for 2 weeks at a time before rotating through the grid. The camera traps captured a caracal in May 2024, which is the first photographic evidence of caracal in Enarau.

Wildlife captured on camera traps: leopard (top), African brush-tailed porcupine (middle left), spotted hyena (middle right), caracal (bottom left), greater galago (bottom right, top), African bushbuck (bottom right).

5.0 Community Wellbeing

5.1 Community Sensitization Forums

One of the goals of Enarau is to educate the surrounding community on conservation and the benefits it can bring in order to uplift livelihoods and support the growth of the Greater Mara Ecosystem. In 2024, Kenya Wildlife Service held two workshops to educate the community on the implications of illegal activities such as bushmeat hunting and illegal logging and charcoal production. A KWS compensation officer was in attendance to address retaliation against wildlife in instances of human-wildlife conflict. Each workshop was attended by 150 members of the community, area chiefs, and elders.

In addition, Nature Kenya held a workshop on 9 August 2024 to discuss the ramifications of poisoning raptors, vultures in particular. Members of the community learned about the cascading effect that poisonings can cause and the benefits of having vultures around to clean up carcasses and manage diseases.

Meetings at conservancy HQ increase awareness of conservation efforts being made at Enarau.

5.2 Predator Deterrent Lights

Nineteen community bomas within and around Enarau Conservancy received predator deterrent lights from Mara Predator Conservation Programme. Each boma received 4 solar powered lights which blink sporadically in the dark. These lights have proven effective in deterring predators such as lions and leopards from approaching enclosures where livestock is kept through the night. The lights mimic people walking around with torches, or temporarily affect the eyesight of predators as they approach. After the lights were installed, fewer nighttime livestock predation events were reported.

5.3 Biocultural restoration workshop

During the second quarter of 2024, a group of scientists gathered in Aitong participating in a biocultural restoration workshop facilitated by Nottingham Trent University. Their discussions focused on principles and frameworks for restoration approaches that acknowledge and integrate Traditional Ecological Knowledge (TEK). The visitors represented various academic institutions, including Nottingham Trent University, Maasai Mara University, Jomo Kenyatta University, and Mount Kenya University as well as CERK and MMWCA.

As part of the workshop, the team engaged with the Enarau local community, who welcomed the visitors with a rich display of Maasai culture. Elders were interviewed to gather traditional ecological knowledge, which provided important insights that informed a perspective paper on biocultural restoration—now submitted to *Nature Ecology & Evolution*.

There was also discussion around creating a cultural centre—a space for preserving and sharing Maasai heritage, documenting traditional knowledge, and supporting women through beadwork and other income-generating cultural activities.

5.4 Community water collection point

In early 2024, the Kipukeri Spring was rehabilitated. A 10,000 L water storage tank was constructed, mainly for use at the tree nursery, but a community tap was added to provide clean drinking water to 20 households who visit daily to collect water. This project was supported by the IMARA program through World Vision and MMWCA.

5.5 Football for conservation

In June 2024, Stew Thomson, a key researcher working within Enarau, provided football uniforms to the Emaro Pirates Football Club. Supporting youth activities in the name of conservation has proven to be an effective strategy to gain familiarity and support from the community for conservation efforts.

5.6 2024 Ultra MARAthon

In November, Enarau rangers participated in the 2024 Ultra MARAthon, taking seventh place. It was a very muddy race, but a wonderful opportunity to gain visibility in the Mara landscape and a motivator for the rangers to keep fit!

6.0 Finances

6.1 2024 Expenditure overview

In 2024, Enarau Conservancy directed its funding toward essential operational costs and a significant infrastructure project. A major investment was made in constructing two research units designed to host international volunteers and researchers participating in the Earthwatch Program. These facilities will strengthen Enarau's capacity for scientific research and global conservation partnerships as well as reduce the dependence on donations for basic sustenance and operations.

2024 Annual Expenses	KES	USD
Operations		
Personnel- (Manager, rangers, tree nursery attendant, planters)	4,746,000	37,968
Administration and logistics	2,496,000	19,970
Capital expenditure (two research units)	10,061,012	80,488
Leases		
2024 Conservancy member leases (3140 acres)	5,334,960	42,679
TOTAL	**22,638,252**	**181,106**

6.2 2025 Projected budget and plans

In 2025, the conservancy anticipates a significant increase in the allocated funds for lease payments, as the rate is increasing from KES 1500/acre to KES 2500/acre. In addition, Enarau hopes to add 1000 acres to the conservancy by bringing onboard additional landowners who are eager to join in the conservation initiatives. Further capital expenditure is allocated for continuing to improve the conservancy headquarters with a restoration center and office block, and a solar power upgrade to decrease reliance on KPC, which is unreliable and costly.

2025 Budget	KES	USD
Operations		
Personnel- (Manager, rangers, tree nursery attendant, planters)	7,152,000	57,216
Administration and logistics	3,787,000	30,296
Capital expenditure (restoration centre and office block, solar power upgrade)	9,000,000	72,000
Leases		
2025 Conservancy member leases (3640 acres)	10,389,000	83,112
TOTAL	**30,328,000**	**242,624**

7.0 Future directions

As one of the youngest conservancies in the Maasai Mara, Enarau was established with the ambition of being a leader in research-based conservation and land rehabilitation practices. 2024 has been very productive in achieving that goal. However, we have identified specific goals to focus on in the coming year:

1. Upskilling our rangers for effective patrols, conflict resolution in human-wildlife interactions, use of monitoring technologies, and leadership development.
2. Upgrading the ranger outpost from canvas mobile tents to modern, eco-friendly accommodation using materials such as light gauge steel and ecoboards of recycled composite.
3. Installing proper storage facilities for financial records, research equipment, nursery tools, and laundry items used by the research unit.
4. Establishing the Enarau Biodiversity Research and Conservation Centre to host scientists and support knowledge generation and sharing on biodiversity.
5. Create a vibrant and functional wildlife corridor between Enarau and Mbokishi Conservation Area.
6. Secure funds to lease an additional 6969 acres within the wildlife corridor and for the eastern expansion of Enarau.
7. Initiate walking safaris for visiting researchers, Earthwatch participants, and other interested partners.
8. Update the current management plan.
9. Upgrade staff housing at the conservancy research camp and headquarters.

8.0 Supporting partners

The successes of Enarau Conservancy in 2024 were supported by:

Wild Philanthropy has assisted with website development, creation of gmail domain, and fundraising.

Centre for Ecosystem Restoration– Kenya, Smithsonian Institute, Jomo Kenyatta University, Mount Kenya University, Nottingham Trent University (UK), Bologna University (Italy), and Wageningen University (Netherlands) have established themselves as research partners in the restoration project at the conservancy conducting baseline biodiversity data collection in 2024.

MMWCA in collaboration with its partners supported several community meetings, the restoration of a spring for fresh water for the tree nursery, water tanks and 20 kg of indigenous seeds for the tree nursery.

Earth Ranger, Ecoscope, and ESRI supported the technology used to put Enarau on the map, utilizing technology to advance conservation.

Mara Elephant Project and Kenya Wildlife Service ranger teams assisted with conflict response.

Mara Predator Conservation Programme (MPCP), Maa Trust, GIZ, and Nature Kenya facilitated trainings and workshops to educate the rangers and management on responding to current challenges. MPCP also contributed the predator deterrent lights around Enarau.

If you would like to support Enarau Conservancy, please visit

https://www.enarautrust.org/donate

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MAASAI MARA

Research, Restore, Conserve

Wetland within Enararu Conservancy