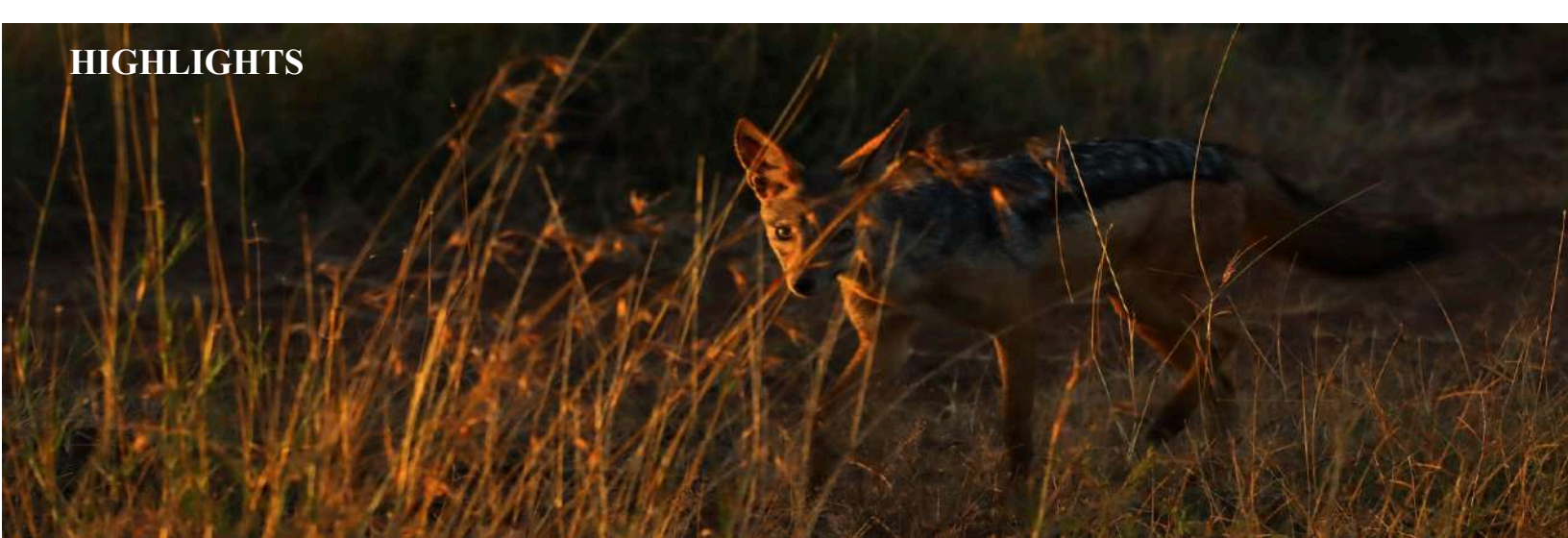


MONTHLY CONSERVATION REPORT  
AUGUST 2025





# HIGHLIGHTS



The Mugie Conservancy is a 200 km<sup>2</sup> Conservation Area located in the North-Western part of Laikipia. The Conservancy is home to several endangered species and plays a key role in connecting Laikipia with the Rift Valley and the Northern Frontier.

Mugie is driven by its mission “To maintain connectivity between the Rift Valley and the Laikipia Plateau; protect and enhance the distinct heritage, history and ecosystem services of the ecological and cultural landscape; conserve and reintroduce endangered species, habitats and natural processes; utilise the sustainable potential of the landscape for measured economic development; whilst safeguarding and promoting the knowledge and skills required for successful conservation and sustainable rangeland management.” The Conservancy engages in several conservation activities explored through this monthly report.

**The General Manager’s message**

*Linear infrastructure remains a significant challenge, with Safaricom recently installing a new overhead fiber optic line without any stakeholder consultation. This was done with little regard for its impact on Mugie’s conservation corridors and broader environmental efforts.*

*The recent giraffe census has confirmed a continued decline in the population, likely due to high predator densities. As a result, few calves are surviving to adulthood, raising serious concerns for the long-term.*

The following table indicates the major achievements and challenges that occurred in the month and the rare wildlife sighting of the month.

Achievement	- A successful rapid giraffe assessment was carried out in partnership with Twiga Walinzi.
Challenges	- Nil
Sighting of the month	- An encounter between a leopard and three cheetahs.

# METEOROLOGICAL DATA



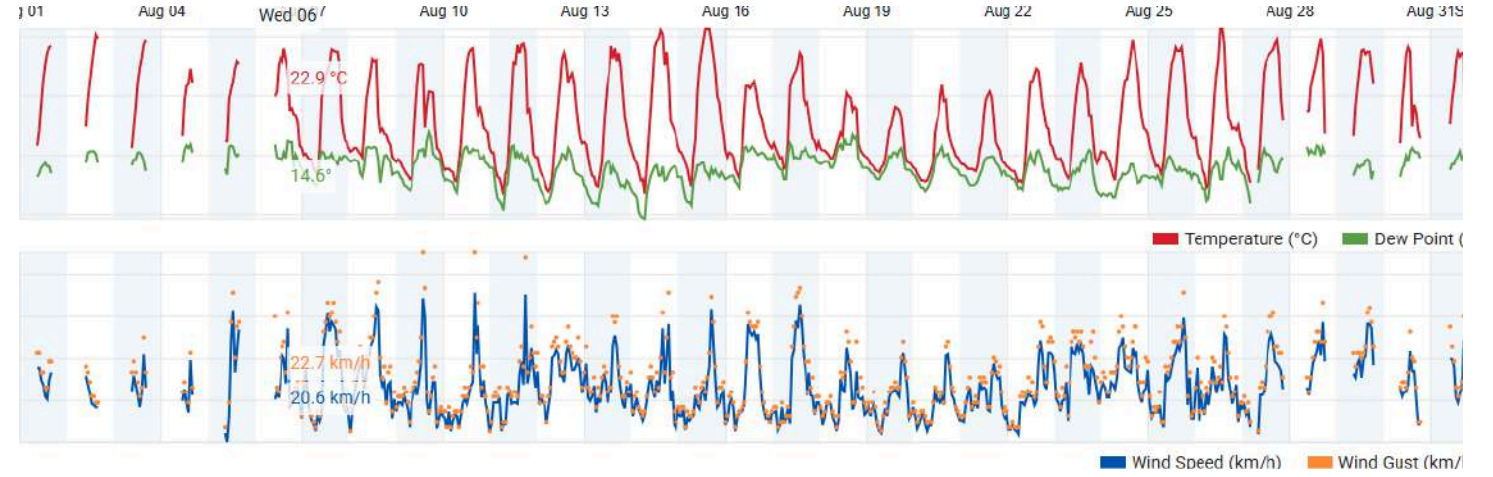
The Mugie Conservancy monitors and records the weather conditions daily to influence the decision-making process based on weather cycles and to have reliable forecasts. The data collected is also shared with the Kenya Meteorological Department for their records. So far, the data collected has significantly supported Mugie.

Rainfall data is collected through 12 manual rain gauges spread across the conservancy. Temperature, wind, pressure, and solar radiation are collected via a weather station installed at the Mugie headquarters

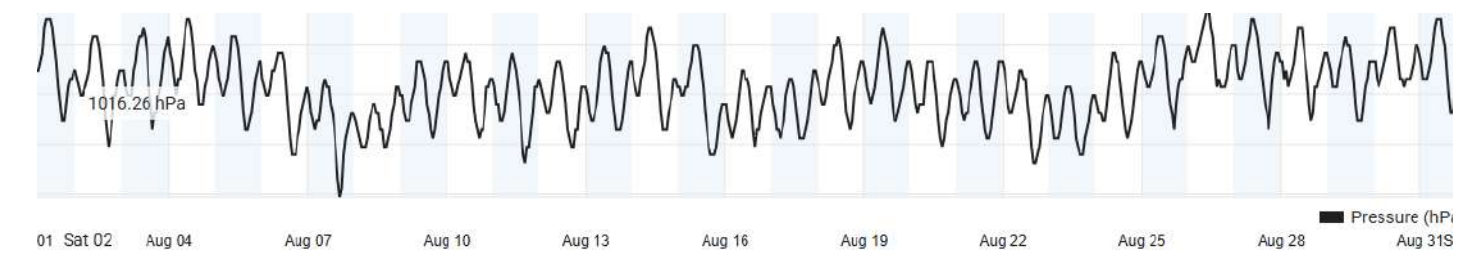
The below table shows the data collected for the various meteorological metrics during the reporting period.

Metric	Max	Min
Temperature	25.6°C	10.6 °C
Dew Point	16.9°C	13.4°C
Humidity	96%	77%
Wind Speed	35km/h	6.6 km/h
Pressure	1,019.30 hPa	1,011.51 hPa

Temperature and wind during August 2025



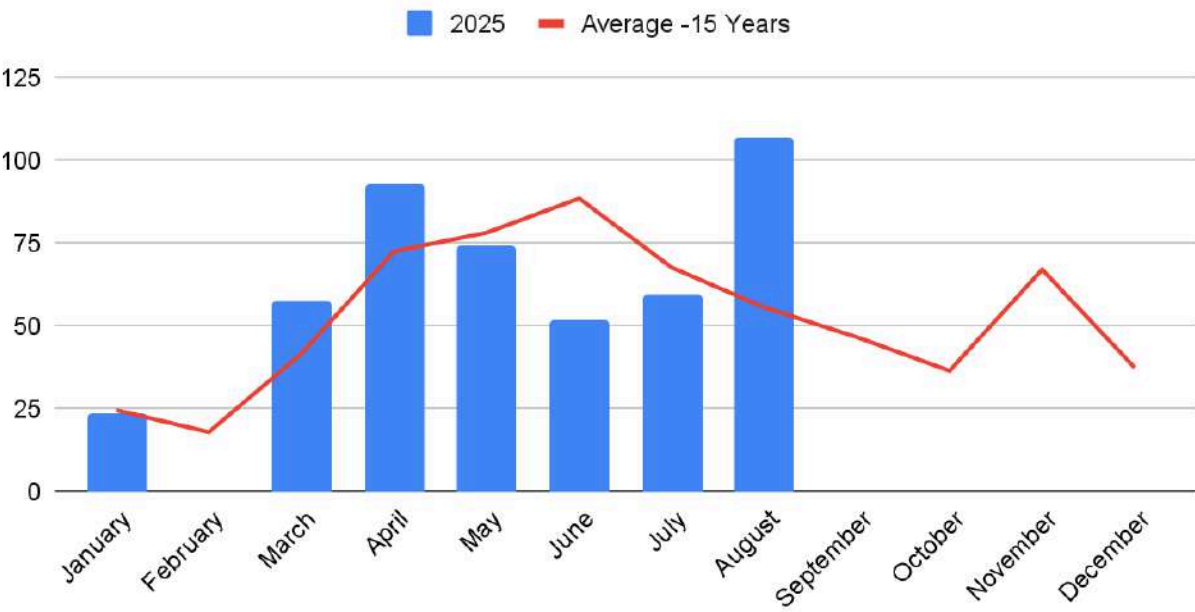
Pressure during August 2025



Rainfall Data in mm

Station	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
HQ	43.6	0	40.3	95.7	62	107	52.5	118					519.1
Lima 6	15.5	0	82	64	76	69	115	121					542.5
Mutamaiyu	3	0	70	46	46	45	57	82					349
Golf	18	0	63.5	107	67	70.5	31.2	168					525.5
Lima 9	56	0	69	94	23	0	71	163.5					476.5
Lima 8	17	0	38	124	10	48	71	43					351
Nomotio	37	0	19	60	180	32	57	81					466
Lima 4	8	0	27.5	110	57	70	62.5	108					443
Lima 2	48	0	35	77	99	0	0	80.5					339.5
Lima 10	20	0	129.5	175	115	82	99	59.5					680
Bravo 6	9	0	55	79	89	62.5	62	117					473.5
Ekorian	27	0	61	82	68	40	38	140					456
AVERAGE	23.67	0	57.48	92.81	74.33	51.73	59.68	106.79					466.49

The below chart shows the rainfall received in the month compared to the 2010-2024 rainfall average.





## WILDLIFE PROTECTION



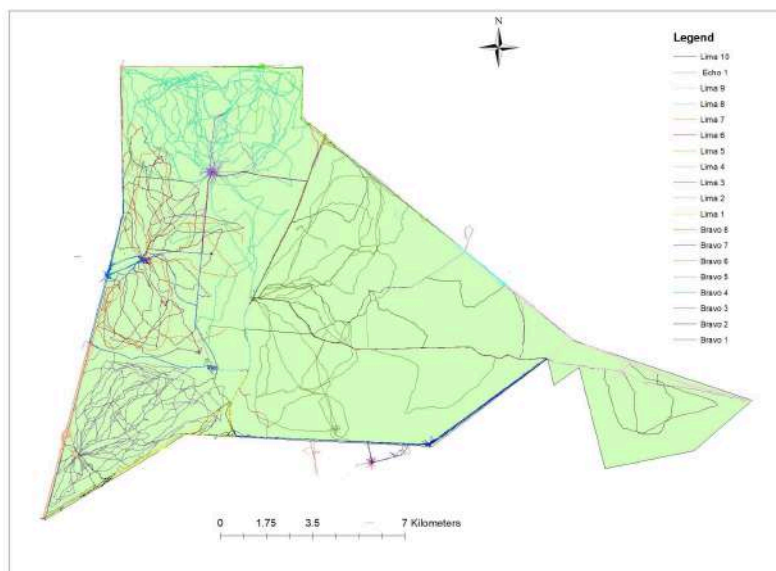
The Mugie Conservancy's rangers patrol the conservancy day in and day out to ensure the safety of all wildlife, livestock, and people living inside the Conservancy. The 50 rangers and 34 NPRs are based on 11 perimeter stations and 7 internal ones, allowing for a comprehensive conservancy coverage. During the month in review, the ranger team covered 8,716 kilometers on foot. The below table shows the kilometres covered on foot by the rangers on EarthRanger in August 2025

Jul	Aug	Sep	Oct	Nov	Jan	Feb	Mar	Apr	May	Jun
10,043	8,716									

To support the rangers on the ground in their operations, Mugie also has a K9 team composed of 3 dogs and 3 handlers. The unit plays a key role in tracking down suspects. Over the years it has helped Mugie solve several wildlife crime incidents and petty crimes in the nearby villages.

Mugie's rangers utilise Earthranger to collect real-time data regarding wildlife sightings and any possible incident to allow for quicker responses and informed decision-making.

The map on the right, generated through EarthRanger, illustrates the areas covered by ranger teams in August 2025. It helps the conservancy identify patrol gaps and make necessary adjustments in the following months to ensure continuous coverage over the long term. The map on the right, generated through EarthRanger, shows the area covered by the ranger teams in August 2025.



INCIDENTS

Data collection regarding wildlife incidents allows Mugie to understand trends and correlations that inform decision-making. Several incidents involving wildlife were recorded during the month in review, said incidents are recorded in the below table.

Incidents		Occurrence	Details
<i>Human-Wildlife Conflict</i>	Predation	3	Two steers were killed by lions near Naibor Corridor and one steer at Maji Mugie.
	Crop raiding	0	Nil
	Property damage	0	Nil
	Retaliation	0	Nil
	Fence	0	Nil
	Other	0	Nil
<i>Vehicle-Wildlife Collision</i>		7	Lokitoe (2 birds), Emuria (2 birds, 1 dikdik), and Kivuruti (1 bird, 1 hare)
<i>Disease</i>		0	Nil
<i>Electrocution</i>		0	Nil

Mugie also supports its neighbouring communities in matters of HWC, the table below summarises the reports received.

Incidents		Occurrence	Details
<i>Human-Wildlife Conflict</i>	Predation	5	Three calves were killed by lions and one calf by a hyena at Kabunoto, while one goat was killed by a hyena at Ngiloriti.
	Crop raiding	0	Nil
	Property damage	0	Nil
	Retaliation	0	Nil
	Poaching	0	Nil
<i>Illegal Logging</i>	Charcoal/Sandal wood	Daily	Significant charcoal burning on Western and Southern boundaries. Some threats on sandalwood harvesting.

# CORRIDOR MOVEMENT



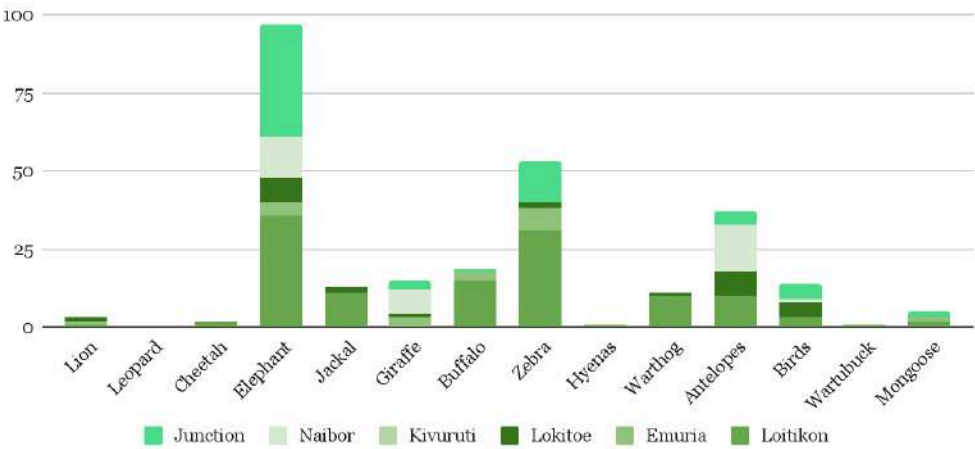
The integrity and functionality of any given ecosystem, and therefore the maintenance of biodiversity and ecosystem services, are made possible by the flow of energy, nutrients, organisms, genes, and information across landscapes. Because of the importance of these flows in the maintenance of landscapes and biodiversity conservation, habitat connectivity is a key conservation element. Mugie is bisected by the National A4 Highway and is mostly fenced in its boundaries, however the conservancy plays a key role in connecting the Rift Valley to the Laikipia Plateau and the Northern Frontier by maintaining corridors that allow for the free flow of wildlife.

## A4 CORRIDORS

The A4 bisecting Mugie is a major conservation challenge as it splits the conservancy in two, threatening the wider landscape connectivity. In order to mitigate the negative externalities of the linear infrastructure, thanks to GPS data collected over the years, Mugie identified 6 major wildlife corridors along the road and placed gaps in the fenceline in the identified locations. In order to reduce the risk of collisions with vehicles, Mugie worked in collaboration with KeNHA to place speed bumps in the proximity of the identified corridors. It is Mugie’s hope to raise funds in order to place more advanced and efficient forms of crossings in each corridor and fence the other side of the road in order to safely funnel wildlife from one side to the other and reduce consequential damages and loss of life due to collisions.

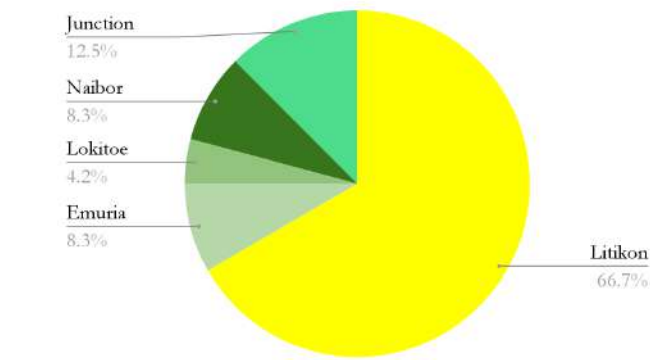
## Recorded species

The below graph indicates the number of selected species encounter rates per corridor.

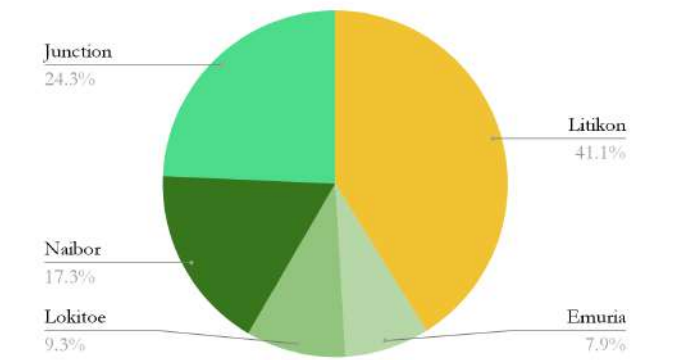


Closer observation and analysis of the data has shown that different species use some corridors more than others. The below chart shows the correlation between major species and individual corridors.

Predators



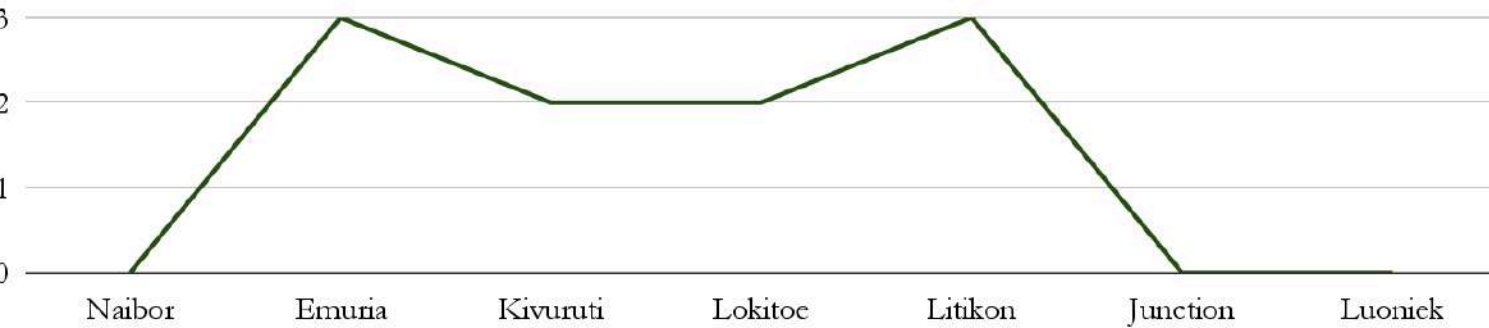
Herbivores



Corridor encounter rates for main species can be seen in the below table

Species	Litikon	Emuria	Lokitoe	Kivuruti	Naibor	Junction
Lion	1	1	1	0	0	0
Leopard	0	0	0	0	0	0
Wildog	0	0	0	0	0	0
Cheetah	2	0	0	0	0	0
Elephant	36	4	8	0	13	36
Jackal	11	0	2	0	0	0
Giraffe	0	3	1	0	8	3
Buffalo	15	3	0	0	0	1
Zebra	31	7	2	0	0	13
Waterbuck	1	0	0	0	0	0
Antelopes	10	0	8	0	15	4
Birds	3	0	5	0	1	5
Warthog	10	0	1	0	0	0
Mongoose	2	1	0	0	0	2

The below table indicates the percentages of Vehicle-Wildlife Collisions per section of the A4

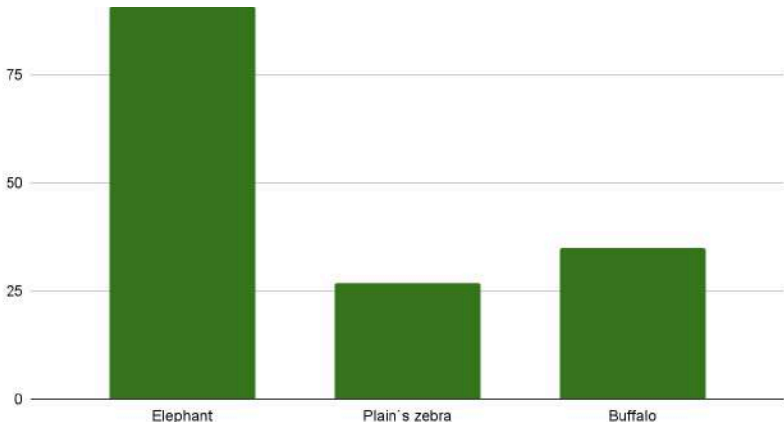




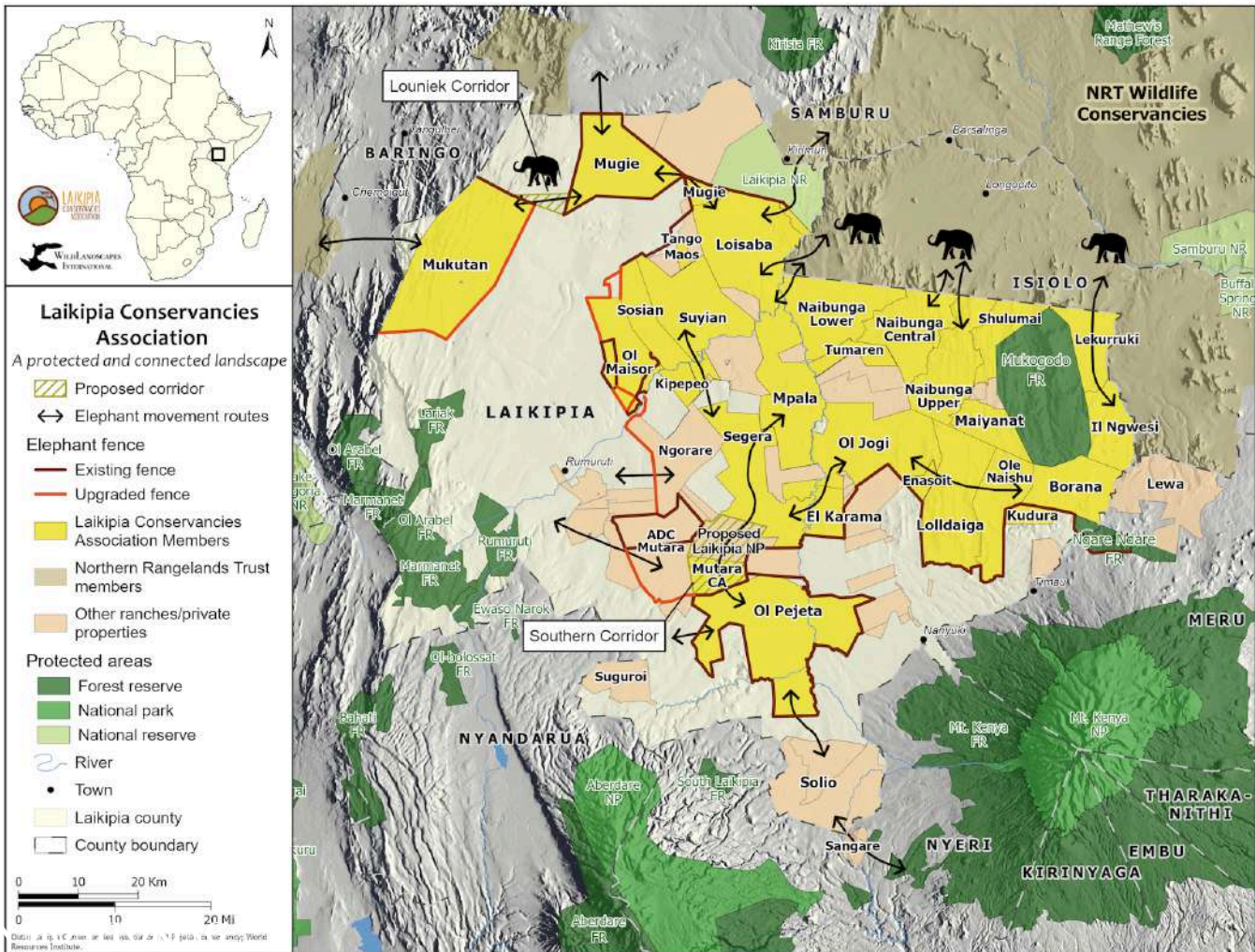
## WIDER LANDSCAPE CORRIDORS

To keep connectivity across the wider landscape, Mugie has two major corridors: Kitenye, which connects to Loisaba Conservancy, and Louniek corridor with Mukutan Conservancy, which strengthens habitat connectivity to Baringo and the Rift Valley. Other corridors include Loitikon and Kilo 1, which link towards Samburu and the Northern Frontier.

The chart below shows the species using the Kilo 1 and Loitikon corridors during the month under review.



The below map shows Mugie in the landscape and the various corridors. From the map it is possible to understand the importance of the Conservancy in connecting the Laikipia Plateau with the Rift Valley and the Northern Frontier.





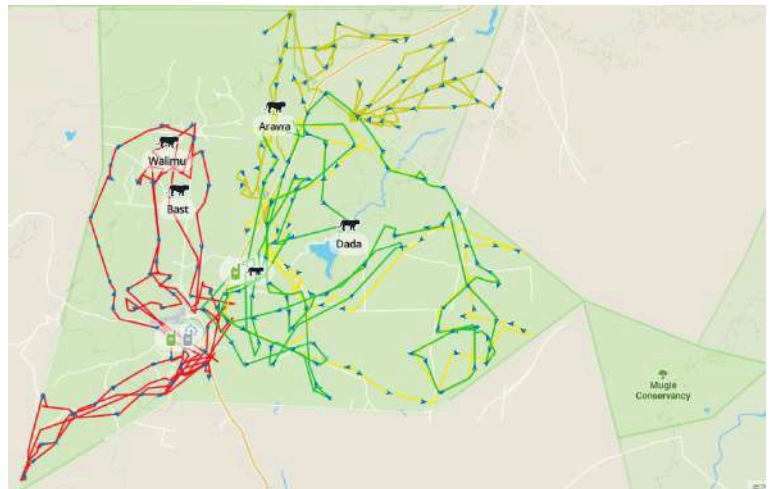
## LION MONITORING



Lions pose a major conservation challenge due to the conflicts that arise from the killing of livestock. Mugie currently has approximately 60 lions with 2 major prides and several smaller groups across the Conservancy. In order to reduce and prevent the predation of livestock, five females in the different prides were fitted with a collar in partnership with Lion Landscapes, KWS and WRTI. The collars allow the Conservation Team to follow the pride movements and prevent incidents from happening by making the herders/community aware of the presence of lions in their specific areas.

The collars also allow the Conservation Team to better understand the movements of the prides within the Conservancy and the overlapping of their territories. All monitoring, tracking, and analysis are conducted through EarthRanger.

The map, extracted from EarthRanger, illustrates the movements of the various collared lions in Mugie. Macheo pride (Vida and Dada). This pride, composed of seven adult females, three adult males, and several cubs, spent most of the month within their traditional range in the central part of the conservancy. They favored the open savanna where herbivore populations were abundant, though their movements extended across the entire central region. No movement outside the geo-fence was recorded from any of the pride members.



Naisidori pride (Arawa), spent most of its time in the north-eastern part of the conservancy, spending some time in Lengese's farm; no predation events were reported during this period.

Jangili pride (Bast and Walimu), the pride was consistently sighted across multiple sections of the conservancy within their territory. They continue to stand out as one of the most well-structured prides in the area, currently consisting of approximately 14 individuals



## VULTURE SAFE FEEDING SITE



Vultures are often widely loathed, however, they play a key role in every ecosystem by keeping it healthy and disease-free as they consume carrion. Unfortunately, the ecosystem services provided by vulture populations are significantly decreasing in Kenya and throughout Africa as the populations are seeing drastic downfalls.

To address the issue, Mugie in collaboration with KWS, WRTI, The Peregrine Fund, Kenya Birds of Prey Trust, and National Geographic opened a vulture-safe feeding site, where poison-free carrion is fed to the birds.

This project aims to pilot a sustainable and safe Vulture Feeding Site and measure its short-term effects on scavenger and predator populations, local communities as financial beneficiaries, and the tourism experience as a gauge of its long-term sustainability. Ultimately, the project aims at creating a series of coordinated vulture restaurants across the northern Laikipia landscape that benefit vultures, and local communities, and that provide a unique tourist attraction, not found elsewhere in Kenya, which will provide sustained income to maintain this project over the long-term. During the month under review, raptor monitoring continued on a weekly basis, and we are pleased to note that awareness and understanding of raptors within the conservancy are steadily increasing

## INVASIVE SPECIES MANAGEMENT



Invasive species are a major conservation challenge across the world, and Mugie is not exempt. The identified invasive species in Mugie are *Schkuhria* spp, *Bidens pilosa*, *Parthenium* spp, *Opuntia stricta*, *Cirsium vulgae*, *Dodonaea viscosa*, *Xanthium strumarium*, *Eichhornia crassipes*, *Datura stramonium*, *Hyacinthus* and *Kalanchoe delagoensis*. To prevent the complete spreading of invasive plants, especially *Opuntia*, Mugie has trained its rangers to identify the plant and report it through EarthRanger so that a team can be sent to remove and rid the plant without the risk of its spreading. *Opuntia* is a major issue in the wider landscape with areas where the plant has up to 80% coverage, drastically reducing pasture availability. *Opuntia* is easily spread by wildlife that eats it; such as elephants, baboons, and other antelopes.

## ACTIVITIES OF NOTE



### **Carnivore Conservation**

#### *Lion*

- Weekly lion monitoring and data collection to understand pride dynamics and behavioural ecology.
- All the various prides were confirmed to be doing well in the month under review.

#### *Leopard*

- Ongoing data collection to support the Uhifadhi wa Chui program and preparing for possible collaring of selected individuals

#### *Cheetah*

- The Chongo Coalition is doing well and its territory occupies the whole of the conservancy
- During the month under review, three additional cheetahs were observed, a mother accompanied by her two sub-adult male offspring. Ongoing monitoring efforts aim to shed light on their social interactions and behavioral patterns.

### **Louniek Corridor**

The Louniek corridor connects Mugie and Mukutan Conservancies, this is a critical corridor that connects the Rift Valley with the Laikipia plateau and further afar. A team of 6 corridor scouts played a key role in community sensitization, information sharing, and data collection through EarthRanger. There were several incidents related to malicious damage of the corridor fence lines and elephants breaking the fence.

### **Coexistence Training**

Thanks to a long-standing partnership between Mugie Conservancy and The Peregrine Fund (TPF), several training sessions are conducted by the TPF team in Mugie. The various trainings aim at promoting a peaceful coexistence between pastoralists and predators, covering topics such as predator-proof boma construction, effects of poisoning, and incident management.

### **Climate Change**

Climate change significantly impacts rangelands in Mugie Conservancy, affecting vegetation, water resources, and ecosystem health. Changes in temperature, rainfall, and extreme weather degrade grazing areas, limiting forage for livestock and wildlife. This scarcity pushes wildlife toward human settlements, increasing conflicts such as crop raids and livestock attacks. Effective rangeland management ensures adequate grazing and water, keeping wildlife within natural habitats.



# WASTE MANAGEMENT



Growing human development means an increased pressure on nature. Waste is a major problem across the world, especially plastic. To mitigate the impact of waste on the local ecosystem, Mugie has constructed a waste management centre where all the waste collected along the A4 highway and waste generated inside the Conservancy is collected and sorted. The sorted waste is then collected by certified recycling companies.

The table below shows the amount of waste in kg collected along the A4 highway during the month.

July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total	Average
196.5	163											359.5	179.75

# EDUCATION



Kids are the future and education plays a key role in supporting them to shape the same. Once a week, the Mugie’s team in collaboration with its tourism partners; holds a Healthy Kids Class and Eco-Warriors Session in which conservation, sustainability, and healthcare topics are discussed with Mugie’s school kids engagingly. The program has been so far proven incredibly successful, with significant interest from all the kids.



## CAMERA TRAPS

Camera traps play a key role in monitoring wildlife movements across corridors and the conservancy as a whole. Mugie has also partnered with Wildlife Protection Solutions to have data-enabled cameras across the conservancy sharing live data with the Conservation and Security Teams in order to improve response speed to any incident.

All the images collected are then sorted with the support of Trap Tagger and then uploaded into different wild books to identify individual animals. The identification of individual animals allows the Conservation Team to better understand the spatial ecology and interactions of identified animals.

A total of 1,894 images were analysed with the help of TrapTagger. During the analysis several images with crossing wildlife and vehicle lights in the background were noted. This highlights the importance of proper wildlife corridors along highways.







## CONSERVATION PARTNERS

Mugie would like to acknowledge and thank the below partners for their continued support in the various aspects of conservation both inside Mugie and in its neighbouring communities.

