

# Dakatcha Nature Reserve

2024  
Second Quarter Report  
April-June

**A ROCHA**  
KENYA

# Message from our team



Dear Partners,

Hello from the Dakatcha Woodlands!

This second quarter of the year has not been an easy one in the A Rocha Dakatcha Nature Reserve. The rains haven't come, illegal activity has increased and relationship with the cattle herders has become difficult. Despite these challenges, our hardworking team are caring for the Reserve, protecting the Woodlands and allowing restoration of any damage by previous owners. We love seeing all the amazing biodiversity that call this Reserve "home" and our researchers have potentially made some exciting ecological discoveries. Management of tracks and roads continues and we've created a nature trail so that all visitors to our Reserve can easily enjoy the Woodlands as much as we do.

As you explore the impactful conservation activities we have undertaken in the last quarter outlined in this report, we trust that you will get a sense of the magnitude of this undertaking that has only been possible through the support of our donors and the local community. Caring for this Woodland cannot be done alone, it is a joint effort that spans across borders. The protection and restoration of this beautiful Woodlands could not happen without you! We are so excited to share the impact of our work over the last few months.

Asante Sana!

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# Land Purchase

## This quarter we purchased 422 acres of beautiful Dakatcha Woodlands habitat

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### **Total acreages bought.**

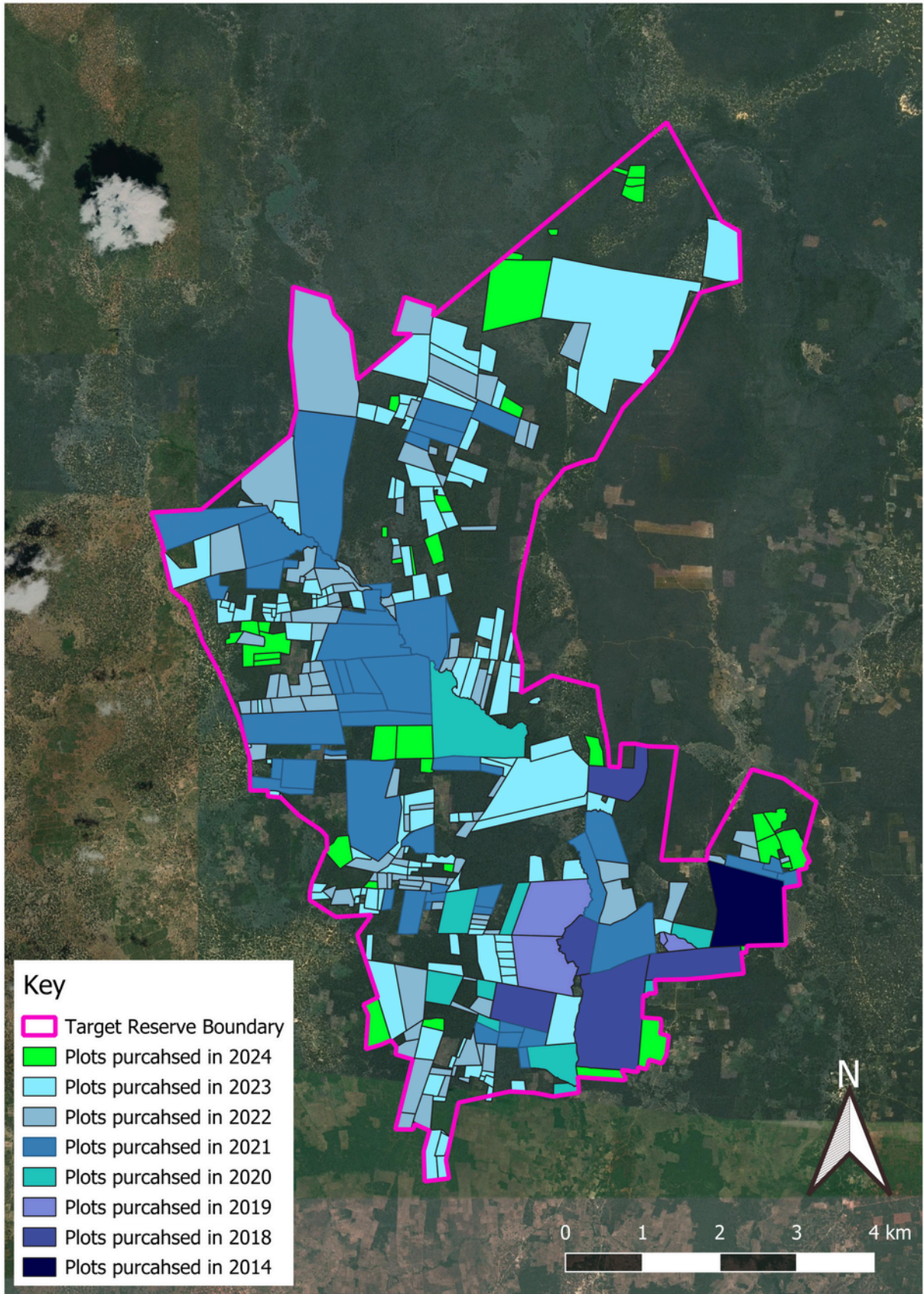
From April to June, we successfully expanded our land holdings by acquiring 422 acres (171 hectares) spread across 19 diverse parcels. Most of these parcels were smaller, starting from as little as 2 acres. However, our most notable acquisition was a substantial 156-acre plot from an investor. With this addition, our total reserve now stands impressively at 8,249 acres (3,338 hectares), signalling significant growth and opportunity ahead.

### **Challenges regarding Land Purchase**

Land prices have increased significantly from when we first began purchasing in the area. Recently, we've acquired land for as much as 55,000 Kenyan shillings per acre, with an average purchase price of 40,000 shillings per acre. This increase reflects heightened demand, particularly from investors retaining larger portions of land within our boundaries.

We uncovered plots within our identified ideal Reserve boundaries that had been recently cleared for agriculture. Capitalizing on this opportunity, we negotiated favorable prices with the vendors, considering the potential for restoration of indigenous species under our stewardship. This strategic acquisition not only enhances our land portfolio at a lower cost but also holds promise for future growth and sustainable development.





**Map of the land purchased each year for the Dakatcha Nature Reserve**

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# Reserve Management

A Rocha's Reserve benefits from the dedicated efforts of twelve scouts who patrol the woodland daily, preventing illegal activities, repairing damages, and documenting its incredible biodiversity.

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## SMART Training and Feedback



**Our monthly feedback session**

SMART has emerged as a crucial tool for overseeing our nature reserve and cultivating a strong work ethic among our scouts. Over the past three months, our scouts have significantly enhanced their proficiency in SMART, which has now become seamlessly integrated into their daily operations. We have hired three new scouts to increase the range and effectiveness of patrols.

Our scouts patrol daily, documenting their routes and noting any illegal activities, reserve management issues, or noteworthy observations they encounter. This approach ensures that each observation is geotagged with supplementary notes. For instance, over the course of a month, we can pinpoint all instances of tree cutting and begin identifying tree types and targeted areas for further action. Further details allow us to determine whether it was recently felled or cut some time ago before discovery. This is one of the many examples of how we can use SMART to better the management of our nature reserve.



This quarter, we implemented monthly SMART feedback sessions with our scouts to celebrate their achievements, acknowledge areas of improvement, and identify areas for further development. These sessions have proven immensely beneficial, significantly boosting morale among our scouts as they feel valued and recognised. The scouts also provide us with valuable feedback from the field, allowing us to address any issues promptly and ensure continuous improvement of the SMART system.

SMART is also a useful tool in tracking the overall effort of our scouts on a day-to-day basis. It provides information on the total hours, distance and area covered during their patrol.

Our office staff then use that information to generate a small weekly report which is used to plan for the coming week. Not only does this keep our scouts work in check, but it is useful when understanding what areas of our reserve need to be covered. The data can be accessed in real time in a very simple dashboard setup.



## Illegal Activities

Throughout the year, we've noticed a fascinating trend: illegal activities in our reserve vary with the rainy seasons. When it rains heavily, incidents like illegal grazing, tree cutting, and poaching decrease significantly. However, once the dry season hits, these activities ramp up again. This insight is crucial for our planning efforts. During dry months, we can then anticipate increased activity and ensure our scouts are well-prepared to address these challenges effectively.

The main illegal activities this quarter have been charcoal kilns, tree cutting and livestock incursions. In the past quarter we found five charcoal kilns, all before they have been burnt. We are working to catch those responsible even before they damage the trees. Additionally, the efforts of reducing illegal grazing is well represented in the reduction of occurrence at 61 in May to only four in June. In May we've seen a marked increase in illegal activity as our scouts continue to improve their use of SMART and become more acquainted with recording observations.

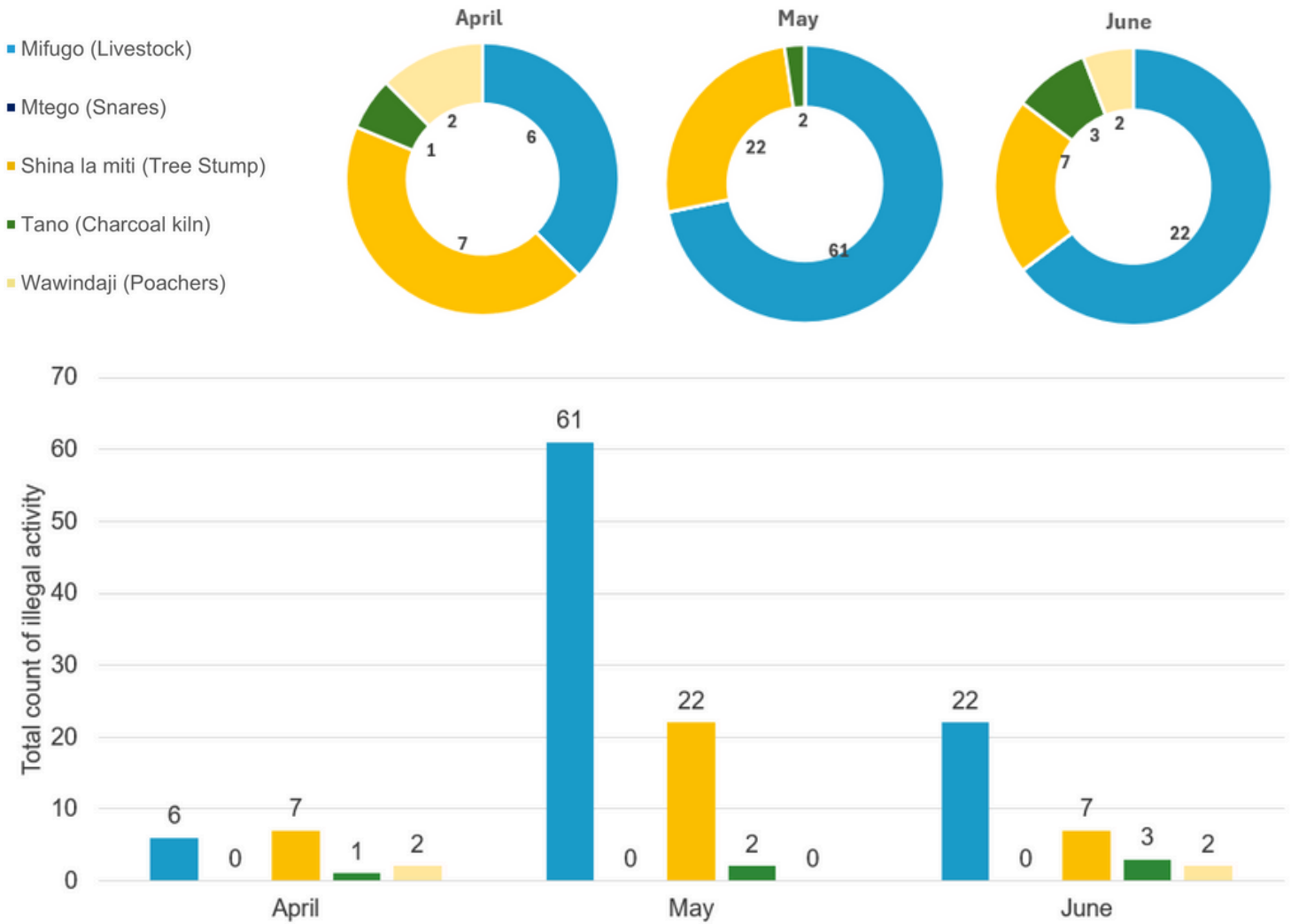
By far, the biggest management issue this quarter has been the arrival of Somali herdsmen with hundreds and hundreds of livestock. The livestock cause large amounts of damage to our reserve and to the property of the local community. The animals eat the vegetation, damage the trees, trample crops and compact the soil. Our reserve is unfenced, the authorities are absent in enforcing property boundaries and the threat of violence has limited the ability of our scouts to prevent incursions. Two of our scouts were attacked in an unprovoked assault and there are reports that at two villagers have been killed by the herdsmen.



***“We protect against herdsmen mostly in Jirikokole and Dhiririsa, the real number keeps on increasing but we are ready to fight by all means to ensure our forest is safe.”***

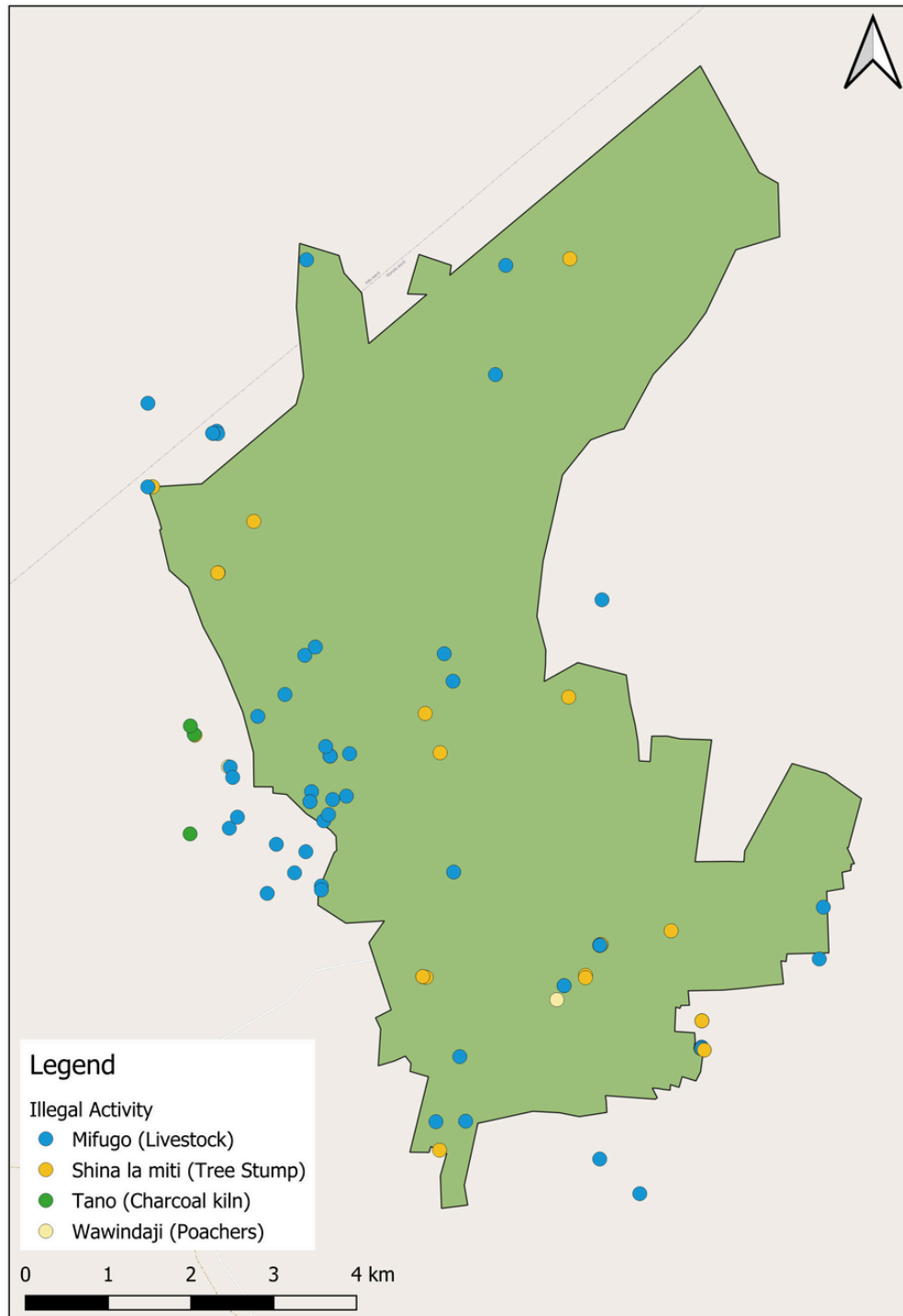


## Illegal Activity Breakdown



Our scouts take photos of each incident so we are also aware of the scale of the incidents.






### Spatial map of illegal activity plotted using QGIS

Using geolocation data and qualitative data collected in SMART, we can then export this information to other software such as QGIS and Power BI to visualise and analyse the data we are collecting.

The map shows spatial biases in illegal activities, with illegal livestock grazing being a major concern. Many livestock incidents occur outside our protected area. Our scouts patrol the outskirts to monitor herders tempted to enter. When found, scouts inform them of our boundary and ask them not to enter. This proactive approach aims to prevent herders from reaching the reserve, focusing on early intervention.

## Creating a Nature Trail in Camp David



In early April we created a nature trail in “Camp David”. Camp David is A Rocha’s central campsite in the Dakatcha Nature Reserve; it is where we hold almost all of our SMART training, research camps and education activities. We created a nature trail to invest in future educational programmes, showcase the beauty of our Reserve, promote conservation and sustainable efforts and above all make it easy for visitors to enjoy the Reserve as much as we do. The nature trail begins at Camp David under Mrihi (*Brachystegia*) trees, crosses a seasonal creek shaded by Mkulu trees, meanders under Sokoke Scops Owl habitat and roosting sites and passes by Buji Alberti, a seasonal wetland filled with frogs and fish that we are restoring as Clarke’s Weaver nesting habitat, before finishing back at Camp David. It is a beautiful walk and we would love to share it with you!

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# Biodiversity Research

We may have found a species of plant that is new to science

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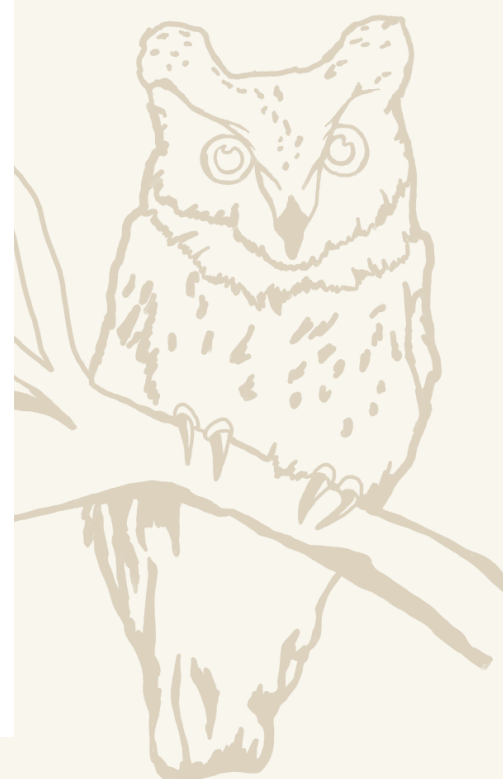
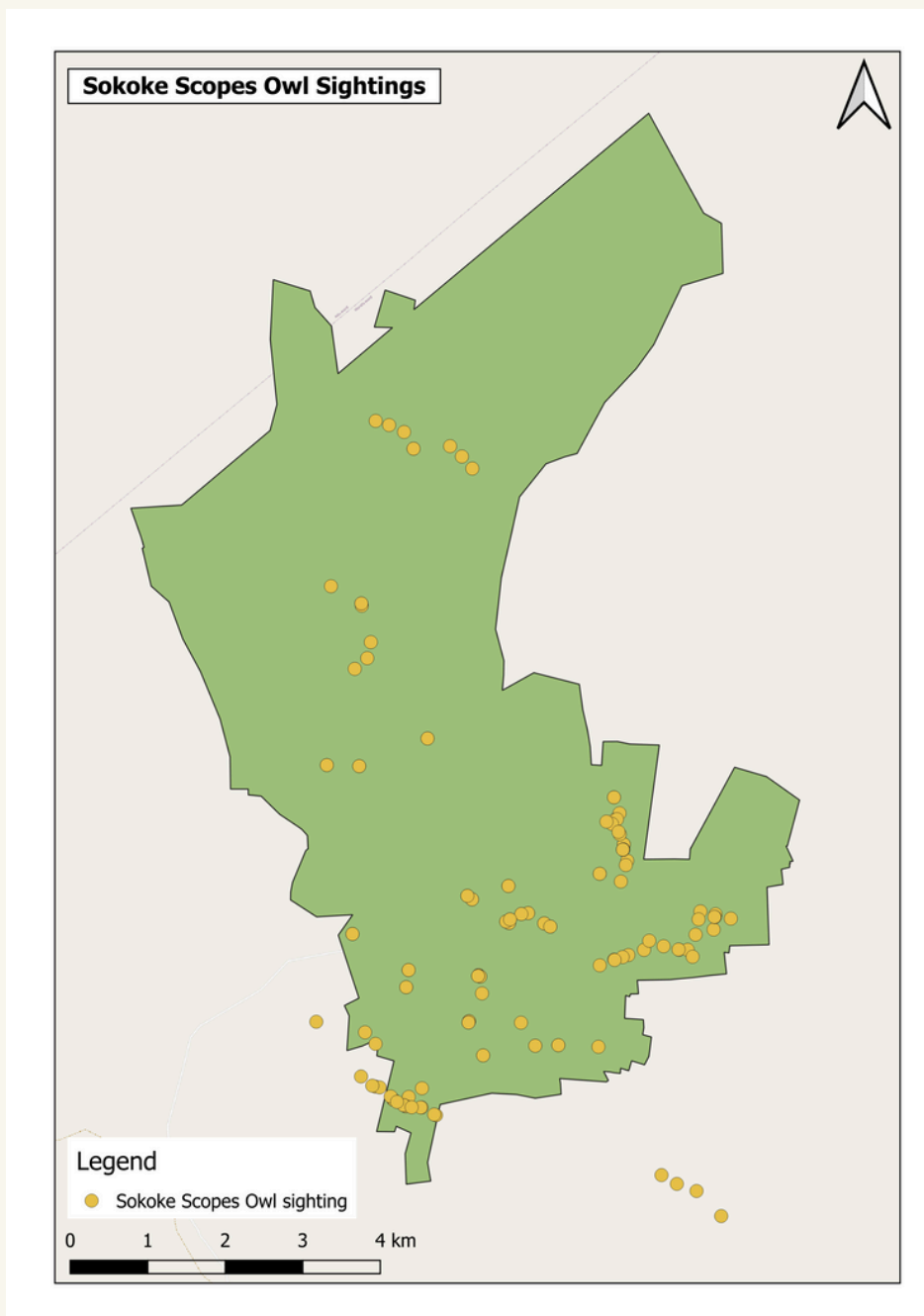


## Possible Discovery of a New Aloe

In July last year, A Rocha Kenya surveyed the flora biodiversity of the Reserve. During that survey, National Museums of Kenya botanist Mwadime who we were working with, recorded 224 plant species including two threatened species, the endangered *Euphorbia fluminis*, and the near threatened *Huberantha stuhlmannii*. Even more excitingly, he found a species of *Aloe* that is possibly new to science. When the clear sap is exposed to air it turns bright red, then purple, then black. More samples from the plant, of fruiting and flowering, need to be gathered to confirm whether anyone has described this plant before. We returned this month and discovered the plant was in flower! The process of confirming a new species is long, but we are hopeful and excited to find out whether we are protecting a species that hasn't even been recorded yet.

# Map of Sokoke Scops Owl Sightings

Last quarter our team of ecologist found two new Sokoke Scops Owl roost sites in the A Rocha Dakatcha Nature Reserve. This exciting discovery prompted us to gather and map all the data from previous sightings of owls. As the map shows, owl sightings are spread fairly evenly across the reserve but there are gaps. ARK will use the map to plan owl surveys for the next quarter. Surveying the ols serves two purposes: first, we increase ecological knowledge of these endemic birds; second, it helps to guide our land purchase priorities and conservation work. ARK land purchase has focused on plots with *Cynometra* trees, the preferred habitat for Sokoke Scops Owls. Recording the presence of these birds within the Reserve confirms that land purchase is protecting their habitat and shows us which plots we should focus on purchasing next.



## Butterflies



In April, a team spent four days in the Dakatcha Reserve surveying butterflies. 139 different species have been found including a possible new species to science. Butterfly surveys have been conducted by entomologist Mike Clifton, African Butterfly Research Institute, Steve Collins, and African butterfly researcher, Szabolcs Sáfián. A Rocha Kenya and the Dakatcha Woodlands have really appreciated the opportunity to work with and be trained by such amazing experts.

# New Partnerships

## We are working with Eden: Projects + People to introduce the possibility of a carbon project to the communities of Dakatcha



The communities of Dakatcha are some of the poorest in Kenya. The area is semi-arid and very difficult to farm; and climate change is only increasing the difficulties. Most families depend directly on what they can grow for food and a bit of cash from the sale of surplus crops. Under financial pressure, such as a medical emergency or school fees, many people turn to the forest for resources. For example, money can be made by burning trees for charcoal. However, the number of trees in the landscape are decreasing rapidly. The community depend on the forest but the entire ecosystem is under threat.

Carbon credits could provide a solution. A well planned project could move money through international environmental markets into the pockets of the community. The community would still depend on the forest, but they would receive money for growing and protecting trees rather than chopping and burning them. People would have an easily accessible livelihood that would help the forest thrive. The more indigenous vegetation that can be protected and restored, the more money the community receives.

However, for such a project to succeed the communities themselves would need to plan it. Eden, together with A Rocha, are holding community meetings in every sub-locality to introduce the project idea to every community member, answer questions and receive feedback.

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# Thank You!

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Land purchase is the best way to ensure that this beautiful patch of nature is protected forever. Without you and your amazing commitment to conservation, the Dakatcha Woodlands and all the species within it might be lost forever. It is only together, with A Rocha on the ground and your generous support, that we are able to see nature thrive in this corner of Kenya. Together we are patrolling with the scouts, together we build nature trails, together we prevent illegal activities, together we investigate new opportunities for caring for the people and the landscape and together we see biodiversity flourish.

Thank you for caring for the Dakatcha Woodlands and for making the A Rocha Dakatcha Nature Reserve a reality.

A Rocha Kenya is working hard as caretakers of this landscape to honour your support. We would love to hear from you if you would like to visit or talk more about how you can partner with us further in this work.

