

## Final Evaluation Report

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Your Details	
Full Name	David Wechuli
Project Title	Conservation of Threatened Harrison's Giant Mastiff Bat at Mt Suswa Conservancy, Kenya
Application ID	43468-D
Date of this Report	5 <sup>th</sup> May 2025

**1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

Objective	Not achieved	Partially achieved	Fully achieved	Comments
To document major threats that the species and their roosting caves face.				<p>The project area faces several major threats, including charcoal burning, vegetation clearance for subsistence farming, and uncontrolled visitation to the caves. These activities pose significant risks to bat habitats and the surrounding ecosystem. Due to limited funding, we were only able to install a protective gate at one cave to help manage visitor access and disturbance. The conservancy management issues have been successfully resolved, enabling the installation of one metal gate. Subject to the availability of funds, we plan to proceed with the installation of an additional gate at another cave in Mt. Suswa. Furthermore, I have submitted an application for a completion grant to support the installation of multiple gates across several caves.</p> <p>As part of our future conservation efforts, we plan to deploy trained bat guardians to monitor cave entrances and provide guidelines to tourists, ensuring responsible visitation. We also propose installing gates or fences at three additional caves to strengthen protection efforts.</p> <p>In the long term, we aim to assess</p>

				the impact of land-use changes on these natural habitats and develop strategies to mitigate any potential negative effects, thereby ensuring the sustainability of bat populations and their ecosystems.
To educate local farmers and school pupils on the importance of bat conservation.				<p>We have established the education and awareness programme targeting outdoor enthusiasts and local communities to improve understanding of bat conservation and highlight the ecological benefits bats provide. Moving forward, we plan to broaden our outreach efforts by educating local farmers, pastoralists, and schoolchildren on the importance of roost protection. This next phase will focus on three additional communities surrounding the Conservancy, with the goal of building stronger grassroots support for long-term bat conservation.</p> <p>We conducted three workshops targeting different stakeholder groups. The first was held with 12 members of the Mt. Suswa Conservancy management team to understand the approach of conservation of caves and the habitat. The second workshop was held at Kisharu School with 65 wildlife club members, and the third at Suswa Camp Lodge, which brought together 76 community members. In addition, a separate workshop was conducted at Maragateway Hotel in Suswa with 35 community participants. This initiative was aimed at educating community</p>

			<p>members on the ecological importance of bats and highlighting the need to protect both the caves and the surrounding habitat.</p> <p>We trained three bat guardians who now serve as custodians of the caves. One of them is stationed at the conservancy office to provide guidance and instructions to visitors before they tour the caves.</p> <p>In addition, we printed three posters and 150 custom-made t-shirts, which were distributed during community awareness workshops to enhance outreach and visibility</p> <p>Together with a team of two MSc students, we conducted a follow-up oral survey to assess community members' perceptions of bats and to evaluate changes in attitudes following the awareness sessions. The findings indicate that community members have begun to appreciate the ecological role of bats and to recognize the importance of protecting caves beyond their value for tourism. Notably, fear and misconceptions about bats are gradually being dispelled, in contrast to the past when bats were often regarded as a sign of bad omen. This survey was designed to measure the effectiveness of our outreach efforts and to inform future conservation education initiatives.</p>
Restoration of degraded part of the conservancy			<p>In collaboration with two community members, we established a tree nursery shade in Rongai and subsequently</p>

			<p>transported the indigenous seedlings to Suswa. Establishing the nursery directly at Suswa was not feasible due to the risk of damage by baboons; hence, it was necessary to identify a safer location within an established setting. A total of 3,000 seedlings were distributed to various groups: 1,000 seedlings to the conservancy management team, 500 seedlings each to two schools, 500 seedlings to Suswa Camp Lodge, and 500 seedlings to community members. However, some cases of damage have been reported, primarily caused by herds of livestock in the area.</p>
<p>To establish a baseline population estimate for the target species, Harrison's Giant Mastiff bats, within the Mount Suswa Conservancy.</p>			<p>One of the MSc students involved in the project will assist in conducting bat population surveys using the total count method.</p> <p>Fieldwork focused on acoustic monitoring of bat populations. Echolocation calls were recorded in 4 accessible caves across Mt. Suswa, allowing us to document bat activity and species presence. We collected data on call frequencies, activity levels, and habitat use within the conservancy. Bats were detected in all surveyed caves and surrounding foraging habitat, with particularly high activity recorded in 2 caves (cave 14C and 18) that provide optimal roosting conditions for sympatric species. Importantly, we confirmed the presence of Harrison's giant mastiff bat (<i>Otomops harrisoni</i>) with 3239 acoustic records,</p>

			<p>providing valuable evidence of its continued use of the Suswa cave system. These findings not only strengthen the case for cave protection but also contribute to the broader understanding of bat ecology in the region as well data to support the ongoing development of the acoustic call library for Kenya.</p> <p>However, in the next phase of the project, we plan to expand the survey to include more caves. This will be supported by the acquisition of a FLIR Systems SR-19 thermal camera (to be hired), a highly efficient tool for estimating bat numbers in cave environments. This technology will complement traditional methods and enhance the accuracy of our monitoring efforts.</p>
The protection of key bat caves within Mount Suswa Conservancy			<p>Due to earlier challenges related to conservancy management between the two counties, the installation of gates at the cave entrances had to be postponed. However, with the issue now resolved and official approval granted, we are clear to proceed with the construction of gates to protect the cave habitats. As a first step, we successfully installed one metal gate. Building on this progress, and subject to the availability of funds, we plan to install additional gates at two more caves in Mt. Suswa. To support this effort, I have submitted an application for a completion grant to facilitate the</p>

				<p>installation of these gates. Furthermore, four signage have been installed at the site: one providing directions to the conservancy office, another to the caves, and an additional sign highlighting the importance of cave protection for <i>Otomops harrisoni</i>.</p>
To map all caves in the Conservancy and determine Those hosting Harrison's Giant Mastiff Bats.				<p>We used a drone to map the caves and surrounding forest, capturing aerial photographs that clearly display the locations and layout of caves.</p>
To develop a three-year action plan for the management of mount Suswa Conservancy.				<p>A stakeholder workshop was successfully held, bringing together representatives from universities, Mt. Suswa management, and local government. The objective was to review project progress and gather input on conservation priorities. A follow-up workshop is planned to engage a broader group of stakeholders, including the general public, Bat Conservation Africa, Kenya Wildlife Service (KWS), IUCN, and local rangers. This plan will outline clear objectives, conservation priorities, and coordinated strategies to guide bat habitat protection, research, and community engagement efforts over the next three years. A follow up workshop will be done during the next phase of completion Rufford grant I have applied for.</p>

**2. Describe the three most important outcomes of your project.**

- a). We now have an extensive education and outreach program in place that will boost messages about the conservation and benefits of our target species and promote visitation to the Conservancy.
- b). Major threats to Mt. Suswa Conservancy's caves and bats foraging areas have been identified and documented, and will provide the basis for the development of a proper 3-year bat conservation action plan.
- c). Bat guardians who are now championing the protection of caves and guiding tourists as well as well-informed local community on the importance of bats. The residents and enthusiasts will enhance messages about the conservation and benefits of bats.

**3. Explain any unforeseen difficulties that arose during the project and how these were tackled.**

There were initial challenges in managing the conservancy due to a dispute over land ownership between Narok and Kajiado counties. However, the matter has since been resolved, and the caves will now be managed by a team from Kajiado County. This resolution has allowed us to move forward with the installation of non-intrusive gates at the cave entrance during the next phase of funding.

A severe downpour significantly worsened road conditions, rendering some areas impassable and leading to several vehicle breakdowns. As a result, we had to rent motorcycles to access the project site. Additionally, due to recent fuel price increases, we made a small adjustment to our budget and secured extra funding to accommodate the rising costs.

**4. Describe the involvement of local communities and how they have benefitted from the project.**

The project actively involved the local community from the outset, equipping them with knowledge on best practices to minimize bat-related conflicts. Through collaboration and knowledge exchange, the community expressed strong support for bat conservation efforts, helping to foster local ownership and long-term commitment to the project.

**5. Are there any plans to continue this work?**

Going forward, I plan to continue this work as several gaps were identified during project implementation. Additional caves and bat habitats will be mapped, and species assessments will be expanded to several localities. To complement ongoing total count surveys, I intend to seek funding to acquire a FLIR Systems SR-19 thermal camera for more accurate estimation of bat populations in caves.

**6. How do you plan to share the results of your work with others?**

A report The results of this project will be shared through multiple platforms to reach local and international audiences. A comprehensive report will be submitted to the Conservancy and the Kenya Wildlife Service (KWS) for inclusion in their annual magazine and website. Additionally, I plan to present the findings at universities to



engage academic audiences and inspire further research. The work will also be showcased at international conferences and workshops to contribute to global discussions on bat conservation and habitat protection. I will develop a manuscript to submit for publication. We and colleagues at Maasai Mara University, Re: wild, National Museums of Kenya are building on the data to initiate a process to have Mt Suswa as a Kenya Biodiversity Area.

**7. Looking ahead, what do you feel are the important next steps?**

I am sincerely grateful to the RSGF for their financial support, which has enabled us to contribute to global biodiversity conservation efforts. Moving forward, the key next steps will involve addressing the gaps identified during project implementation. These include expanded habitat mapping, comprehensive species assessments, the installation of strategic gates at cave entrances, and the integration of advanced monitoring tools such as thermal imaging. I hope to continue partnering with RSGF as we work to broaden the scope of research and strengthen long-term conservation strategies.

**8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?**

The Rufford Foundation emblem was prominently displayed on all banners, t-shirts, and leaflets used during outreach events. The RSGF was actively acknowledged during community discussions and engagement activities, and it will continue to be credited in all future publications and communications related to this project.

**9. Provide a full list of all the members of your team and their role in the project.**

Simion Nkuito played a pivotal role in facilitating communication and coordinating our scheduled events, helping to create an environment that encouraged community involvement and engagement. His efforts were instrumental in fostering a strong "community spirit" around the project.

Angela Mingusa was responsible for assisting in educating and spreading conservation information to the general public during our seminars. She played a key role in delivering content through spoken presentations, helping to raise awareness about bat conservation.

Erick Keter was enthusiastic about gaining hands-on experience with bat research methodologies. He actively contributed to the project's execution, particularly in recording and analyzing bat echolocation data. Additionally, Erick played a key role in the educational outreach efforts, engaging both school and community groups in raising awareness about bat conservation.

**10. Any other comments?**

I have concrete plans to continue bat research and conservation activities in collaboration with local residents and postgraduate students. Both short- and long-term measures for bat conservation at Mt. Suswa will be pursued, with a particular

focus on ongoing education and awareness campaigns. Our efforts will prioritize engaging school patrons and pupils, especially those involved with the Wildlife Clubs of Kenya. This initiative aims to shift perceptions and transform the community from viewing bats as threats to recognizing them as valuable allies in conservation.

This long-term strategy is expected to foster a more positive relationship between the community and bats. We also anticipate additional funding support from RSGF and look forward to collaborating with other donors to further refine our strategies for bat conservation and community development. We deeply appreciate the opportunity to work closely with RSGF in these efforts

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**ANNEX – Financial Report**

**[Intentionally deleted]**