Project Update Report

Project Title: Monitoring Sokoke Scops Owl and Usambara Eagle-Owl Population, and Awareness-raising in East Usambara Mountains, Tanzania

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Date: 23rd March, 2026

1. Introduction

This report provides an update on the progress of the ongoing owl conservation and habitat restoration project in the East Usambara Mountains, focusing on Amani, Kambai, and Kwamgumi Forest Reserves. The key objective of this project is to improve the conservation status of the Sokoke scops owl and Usambara eagle-owl species through scientific monitoring, restoration of degraded habitats, and strengthening positive community attitudes toward owls.

All project activities were conducted under valid research permits issued by the Tanzania Wildlife Research Institute, the Tanzania Commission for Science and Technology, and the Tanzania Forest Service Agency, ensuring compliance with national research and conservation regulations.

2. Owl Population Monitoring and Key Findings

2.1 Sokoke Scops Owl

Repeated surveys were conducted in both previously known and newly explored forest patches, using the call-playback method. The Sokoke Scops Owl was recorded in 7 out of 8 previously documented sites, confirming the persistence of established territories. In addition, one new location was identified, expanding the known distribution within the study area. This species is known to occupy relatively small territories (approximately 200 m^2), which supports the repeated detections within the same sites.

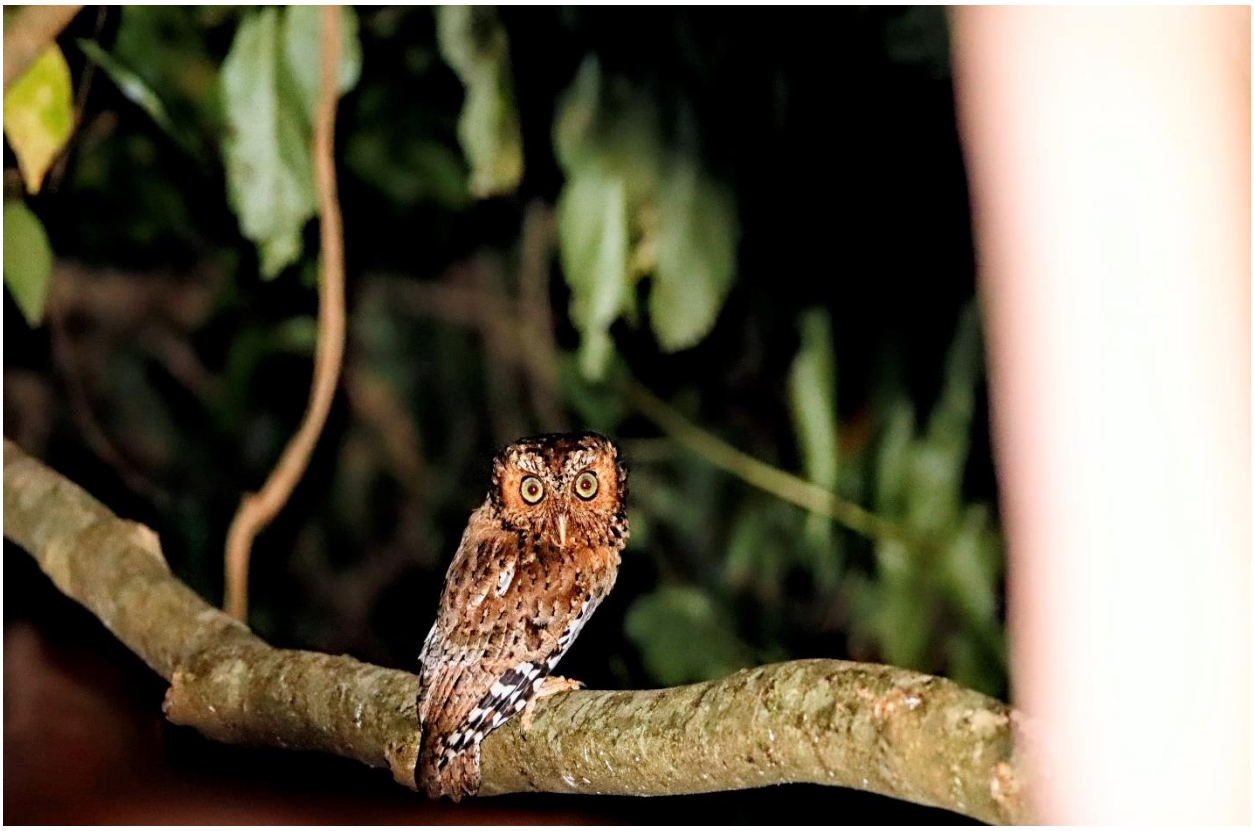

Fig 1: The Sokoke scops owl

2.2 Usambara Eagle-Owl

Using the call-playback method, the first phase of this project recorded nine territories of the Usambara eagle-owl, each occupied by a male and a female. Of the nine previously recorded territories, four pairs were detected during this phase. While this may suggest reduced detectability, it is important to note that this species occupies larger territories and may remain silent for extended periods. Additionally, vocal activity in the Usambara Eagle-Owl appears to be influenced by environmental conditions. The species tends to be less vocal during nights of complete darkness and shows increased calling activity under moonlit conditions. Furthermore, cold and rainy nights significantly reduce vocalization, which can affect detection rates during surveys. Encouragingly, the project documented five juveniles across three territories (2, 2, and 1 individuals), indicating successful breeding and continued reproductive activity within the population.

Fig 2: The Usambara Eagle-owl's juvenile

3. Native Tree Nursery Establishment and Habitat Restoration

The project successfully established a community-supported native tree nursery, producing over 3,000 seedlings sourced from healthy forest patches with guidance from environmental officers. A total of 10 native tree species were cultivated, selected based on their ecological importance to owl habitats. Notably, Brachylaena huillensis, which is known to provide nesting cavities for Sokoke Scops Owls, and Allanblackia stuhlmannii, associated with observed nesting sites of the Usambara Eagle-Owl, were prioritized. Local community members actively participated in the establishment and maintenance of the nursery, ensuring proper care and survival of the seedlings. To date, over 2,000 seedlings have been planted in degraded forest areas as part of ongoing habitat restoration and enrichment efforts.

Fig 3: Team members inspecting the native tree nursery

4. Community Engagement and Awareness

The project continued to implement community awareness activities aimed at improving perceptions toward owls and reducing negative beliefs associated with these species. Engagement was carried out through village meetings, church gatherings, school visits, and focused group discussions, providing platforms to share knowledge on the ecological importance of owls. These activities have contributed to gradual improvements in community understanding and attitudes. In addition, local guides were trained to monitor owl calls and sightings and to act as resource persons within their communities. This has enhanced local capacity to support conservation efforts and ensured continuity of awareness activities even in the absence of the core project team.


Fig 4, 5: Focused group discussions with traditional healers in the villages

5. Capacity Building and Local Participation

The project has significantly strengthened local capacity by actively engaging community members in conservation activities and decision-making. Training sessions equipped local volunteers with practical skills in tree nursery management, habitat restoration, and basic wildlife monitoring, particularly for owls. These volunteers have played an important role in maintaining the nursery, supporting tree-planting efforts, and assisting with field observations. Collaboration with forest officers also provided technical guidance on restoration activities, including selecting appropriate native tree species and identifying priority restoration sites, ensuring alignment with national forest management practices.

In addition, the project has maintained close coordination with forest authorities and local stakeholders to address conservation challenges. During field surveys, instances of illegal logging and forest encroachment were recorded and reported to forest officers, contributing to improved monitoring and response efforts that help reduce these threats. Engagement with local leaders, community groups, and environmental committees has further strengthened knowledge sharing and collective action.

6. Challenges and Considerations

One of the key challenges encountered is the variable detectability of the Usambara Eagle-Owl, which may remain silent for extended periods due to its large territory size and behavioural patterns. This requires repeated surveys to ensure accurate population assessments. Additionally, maintaining consistent community engagement remains essential to sustain positive conservation outcomes,

particularly in areas where traditional beliefs about owls persist. During the project period, the general election in the country also posed a challenge, as the team experienced some resistance in certain villages where outreach activities were conducted, with some community members initially mistaking the team for a political group. This challenge was addressed by involving local religious leaders and village elders, who played a key role in clarifying the purpose of the project and building trust within the communities. Furthermore, the unpredictability of seasonal rainfall affected the planning and timing of restoration activities, occasionally requiring the team to reschedule fieldwork and tree planting efforts to ensure effectiveness and safety.

7. Next Steps

The project will continue with further monitoring of owl populations, including breeding success and habitat use. In the coming week, the project team, in collaboration with the local villagers will plant the remaining tree saplings from the tree nursery to the forest. Follow-up assessments will be conducted to evaluate the survival rates of planted trees and the effectiveness of restoration efforts. Additional community engagement activities will be implemented to reinforce positive attitudes and expand outreach to new areas. The project will also focus on completing perception surveys to quantify changes in community attitudes and on preparing a comprehensive baseline report to support future conservation planning.

Appendix

Fig 6: The project leader testing a sound gun before the night survey

Fig 7: Local volunteers carrying the tree saplings to the forest

Fig 8: Project leader planting a tree in a degraded area