#### PROJECT STATUS REPORT



## **Purpose the project**

This project, in partnership with the Mt Suswa Conservancy and the Angaza Vijiji-Community Based Organization, we (i) documented major threats that the Harrison's Giant Mastiff Bat and their roosting caves face. The threats will be used to assess how land-use changes are affecting these natural habitats and advise on how to mitigate any potential negative effects, (ii) established how bats use the Mount Suswa caves, the surrounding foraging habitats, (iii) established a tree nursery to raise seedling of indigenous trees for restoration of degraded part of the conservancy, (iv) educated local farmers, school pupils and pastoralist on roost conservation, monitoring protocols, capitalizing on cooperative relationships to protect key roosts and (v) training bat guardians to control visitors into bat caves and to share information.

### Conservation of Harrison's Giant Mastiff Bat at Mt. Suswa, Kenya

PROJECT STATUS REPORT				
Project Name:	Conservation of Harrison's Giant Mastiff Bats (Otomops harrisoni) at Mount			
	Suswa Conservancy			
Project ID:	43468-D			
Project leader(s)	David Wechuli			
Project	Pufford Foundation			
Supervisor:				
Submission	October 30 2024			
Date:	0000001, 50, 2024			
PROJECT PROGRESS REPORT				
			Explanation	
Schedule:		x	On Track	
Resources:		Х	On Track	
Budget:		x	On Track. Only minor amendments were needed to	
			meet other key expenses	
Scope:		х	On Track	
Legend	RED – Action RequiredAMBER – Needs AttentionGREEN – On			
	Track			

#### ACCOMPLISHMENTS THIS PERIOD

*Key project activities completed for the project in the current reporting period.* 

**Bat surveys/ monitoring:** Echolocation calls were recorded by the SM4 bat detectors (Wildlife Acoustics, Inc., Massachusetts, USA) to record for free flying bats near the caves and in the foraging sites (Fig. 1). Detailed measurements of time and frequency parameters will be performed in Avisoft SASLab Pro using the automatic parameter measurement tool.



Figure 1. Setting SM4 Bat detector to record echolocation calls for bat near caves and forest

## Conservation of Harrison's Giant Mastiff Bat at Mt. Suswa, Kenya

# Documenting threats to caves and foraging areas.

The conservancy Charcoal burning for commercial sales and vegetation clearance to create room for agriculture (Fig. 2).



Figure 2. Charcoal burning at the Mount Suswa Conservancy

### Assessing cave roosts.

We evaluated whether the bat colonies are maternity and any forms of disturbance that would



affect them (Fig.3). Thus, using this information, we are able to lay a strategy to lessen tourist pressure and the number of tourists. We continue recording echolocation calls in the Conservancy's caves and surrounding habitats using acoustic recorders. The recorded calls are helpful in providing information about the abundance of the vulnerable and other bats roosting in caves.

**Figure 3**. With my team assessing the status of bat colonies and caves at Mount Suswa Conservancy

**Engaging bat guardians.** The trained bat guardians continue to watch over the caves to provide important information, to the tourists visiting the caves, as well as documenting human threats in the conservancy. One bat guardian is based at the office area/and information centre to receive and share first-hand information with visitors about the conservancy. Information provided include, restrictions on seasonal and daily timing of visits to avoid times when bats are vulnerable, closure to parts of caves close to bat colonies, time limits on visits, use of bright lights, and supervision of visitors by bat guardians.

## Conservation of Harrison's Giant Mastiff Bat at Mt. Suswa, Kenya

### October 30, 2024

**Establishing tree nursery:** Women and youth from the local community are involved to raise seedlings for restoration of the sites as well as sell the extra seedlings as a source of income to supplement their livelihood (Fig. 4).



Figure 4. Established tree nursery for restoration of degraded forest at Mount Suswa Conservancy

**Education and awareness campaign:** Conducted four workshops to advance the awareness of bat conservation among local community leaders (administration-areas chief, assistant chief and village elders), local residents in two villages, and three school wildlife/environmental club patrons and pupils.

### PLANNED ACCOMPLISHMENTS NEXT PERIOD-2024 AND 2025

Key project activities expected to be executed for the project phase

- 4 Documenting the threats to bats, caves in the conservancy and adjoining areas
- Enhanced community awareness and education program to different action groups
- Assess the status of O. harrisoni bat species at another potential cave sites within and adjoining areas of the conservancy.
- **4** Tree planting in the Conservancy and adjoining areas.
- To undertake an aerial mapping of caves in adjoining areas of the conservancy-the surrounding habitat used by the Giant Mastiff Bat using a drone. Caves will be mapped over an area of approximately fifteen hectares. The aerial data collected by drone will be leveraged to create 3D maps, which can then be compared to pre- and post-habitat conditions.