

Project Update: August 2024

The project aims to collect baseline data on fruit bat species in Mangochi through roost monitoring and community engagement. Specifically, we want to record data on the distribution, population status, foraging ecology, roosting characteristics & behaviours and their local conservation status.

This is how far we have gone with the first phase of the project:

Roost Inspection and Community Surveys

We are using school wildlife clubs and informal interviews with communities to gather local knowledge of fruit bat roosting sites and activities, as well as to understand the community's knowledge and perceptions towards bats, local threats and usage of fruit bats. We are using the attached poster and fruit bat pictures to aid easy identification of fruit bat species and understanding of our research project. So far, we have surveyed 11 villages of which mostly are located along the lakeshore of Lake Malawi. So far, through direct observation, we identified the bat species to genus level, *Epomophorus* sp. There are five species included in this genus, being *E. labiatus*, *E. crypturus* and *E. wahlbergi* the most common in Malawi

We found six main roosts and several side, temporary and historical roosts. These roosts are mainly trees but also include inhabited thatched and tin-roofed buildings and are currently being monitored as part of our data collection.



Figure 1: *Epomophorus* species roosting in *Ziziphus mauritiana* tree



Figure 2: Roosting in a tin-roofed building



Figure 3: Engaging with Community - (a) Interview with DNPW Park Ranger (b) Residents watching their fruit bats

Additionally, we are identifying feeding roosts and collecting spit-out seeds to determine which fruits are being consumed. The collected seeds are being preserved and will be planted. Through monitoring feeding roosts and leveraging local knowledge, we have already identified the following fruits being consumed by bats: *Ficus* species, *Xanthocercis zambesiaca*, *Azadirachta indica*, *Ziziphus mauritiana*, *Diospyros mespiliformis*, *Tamarindus indica*, *Eugenia jambosoides*, *Psidium guajava* and *Kigelia Africana* (flower).

During the community surveys, we have identified the following threats:

1. Fruit bat persecution, including stoning and disturbance while they are roosting, mostly carried out by young people.
2. Habitat destruction through cutting down roosting trees, uncontrolled bushfires in community forests, and trimming of roosting trees, which reduces foliage density.
3. Hunting of bats for traditional medicine and trade, involving both locals and foreigners.



Figure 4: Uncontrolled Bushfires in a community forest

We have been working with school wildlife clubs in areas where we identified roosts and fruit bat activity. In total, we engaged with 5 wildlife clubs, through presentations, roost visits and involving the students in the roost monitoring. The community awareness activities aim to promote the community to understand the importance of conserving fruit bats and teach how

to mitigate the identified threats.



Figure 5: Roost Visit lessons and bat talks with Wildlife club members at Namazizi and St. Luis Primary School