MURCHISON FALLS NATIONAL PARK, UGANDA ROAD PROJECT PHASE TWO FIELDWORK REPORT (01/02/2026 to 28/02/2026)

Background

I spent the month of February 2026 conducting the second phase of my road ecology project in Murchison Falls National Park, (MFNP) Uganda. The data collected are aimed at determining whether mammal presence and local spatial distribution differs across dirt and tar roads in the northern section of MFNP.

Data collection protocol

We systematically recorded the presence and sighting distances (using a range finder; Nikon Aculon AL 11) of common medium-to-large mammals along dirt and tar roads daily from 08:00 hr to 14:00 hr in the northern bank of MFNP. For each road type, we had a random starting point located at least 1 Km from human infrastructures (camps, lodges, etc.) and then sampled systematically at 500 m intervals spending 10 minutes at each sampling point. We sampled 35 points on the tarmac and 37 points on the dirt roads. We had four replicates for each road type. In addition, we recorded the traffic volume as the number of vehicles passing during the 10-minute interval we spent at each sampling point. Other variables recorded included season, dominant vegetation type, and weather.

Data handling

The data were recorded into a data collection application known as Cyber tracker. The data have since been downloaded from the application and stored as a Microsoft Excel CSV file.

Field observations

Several field observations were made during our fieldwork. Firstly, we observed a stark contrast in traffic volume between dirt and tar roads with tar roads having significantly higher traffic volumes. Secondly, we observed that some motorists do not observe the recommended 40 Km/hr speed within MFNP. This increases the likelihood of wildlife-vehicle collisions. Indeed, we encountered some road kills during our fieldwork. However, since road kills attract a fine of over 100 dollars, we learnt that motorists immediately hide the carcasses after killing the animals; hence, it is very difficult to determine the number of road kills in MFNP. Thirdly, our field observations show a similar likelihood of recording common mammals on both tar and dirt roads suggesting habituation of common mammals to roads and traffic in MFNP; however, this is still pending empirical analysis. Analyses will be done soon. Lastly, we observed a likelihood of bush encroachment by Borassus aethiopum (Figure 4). This plant likely outcompetes and excludes other plants from growing near it. For instance, we observed that combretum species within the eastern section of the Northern bank were dying with little to no regeneration, whilst Borassus aethiopum species is taking over the whole area. Besides, we observed and think that this species is replacing acacias and several grass species (key food sources for most wildlife) in most parts of the northern section of MFNP.

Conclusion and next steps

In conclusion, I wish to thank the Rufford foundation for funding the execution of this project. I am grateful to my field team which included Mr. Kagwa Lasto (driver), and Ms. Tumworobere Alice (Uganda Wildlife Authority ranger & research assistant). I also wish to extend my sincere gratitude to Dr. Herbert Kasozi (and the Centre for Strategic Ecological Practices, CSEP) for his input in this project. Going forward, I have a few weeks of rest as I prepare for the final phase of this project which will be a community conservation education out-reach program on the impact of human presence, activities and infrastructure on wildlife. This will be conducted in selected secondary schools surrounding MFNP.

Appendix

Figure 1: Recording the sighting distances of common mammals that use areas close to roads in Murchison Falls National Park, Uganda

Figure 2: Driver carefully evades a Buffalo (*Syncerus caffer*) that is feeding along a road verge in Murchison Falls National Park, Uganda

Figure 3: Lelwel hartebeest (*Alcelaphus buselaphus lelwel*) crosses road in Murchison Falls National Park, Uganda

Figure 4: Borassus palms (*Borassus aethiopum*) encroaching on most of the northern section of Murchison Falls National Park, Uganda