Project Update: March 2022

Introduction

The project started with study and data collection sites visitation and communication to the community around the study site was conducted for 2 days consecutively. During site visitation, I was able to meet different beekeepers from the respected areas under the help of district council offers and decide on the appropriate sites for the project to be undertaken.

The data collection took a total of sixteen days from 6 to 21 February 2022, in which 8 days were spent at each study site.



The figure shows some members form a beekeeping group at the apiary site, during site visitation.



The figure shows some members form a beekeeping group at the apiary site, during site visitation.

Data collection process

The data collection process was successful for phase one that we termed as a short rainy season, and data collection was based on the methodology as described in a fund request proposal. During data collection, I was able to collect all data on plant diversity and foraging preferences by assessing forage visitation in both study sites.

For plant diversity assessment the data collected was the identification of plant species (plant names), classification of identified species to family level, several plant species, the flowering status of the plants as either they have flowers or not during the time of the study. In addition, I identified the life form of those plants as either grass, forbs, or shrub, and identification of GPS coordinates from each quadrat formed. Moreover, for foraging preference, I was able to incorporate as many quadrates as possible and study the visitation rates per time as prescribed in the methodology.

The following activities

i. As of now, I am proceeding with the analysis of phase one data.

- ii. As the concern was it would be great if I to collect information for different rainy seasons. Therefore, I am also preparing and waiting to start phase two of data collection for the long rainy season, the time for data collection in that aforementioned season will be late in April. All the information for both seasons will be included in this project and communicated to the community as well.
- iii. I have also started to develop some other parts of the manuscript with exception of the results, discussion, and recommendation.
- iv. Preparation of training and knowledge sharing to beekeepers and other related stakeholders; this will be done after data collection and its related analysis.
- v. I have also started to prepare a special report to be submitted to RUFFORD based on what has been done so far.

Some pictures during data collection.

Here are some pictures from the field, during data collection



The figure shows mountains in Mkomazi national park



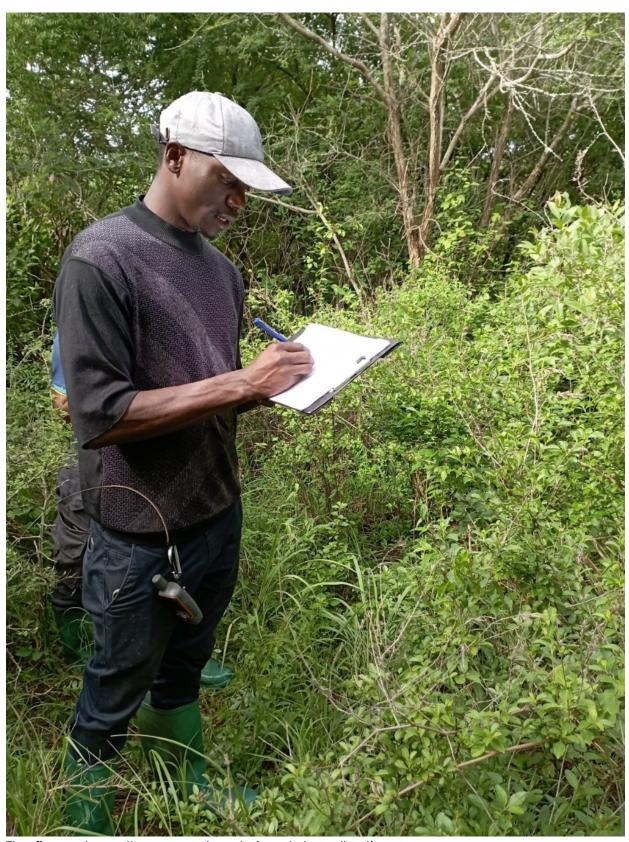
The figure shows a researcher and botanist during data collection



The figure shows one of the plant species with many flowers, but surprisingly no bee was observed at all quadrates to visit flowers of that plant. (More information in a report)

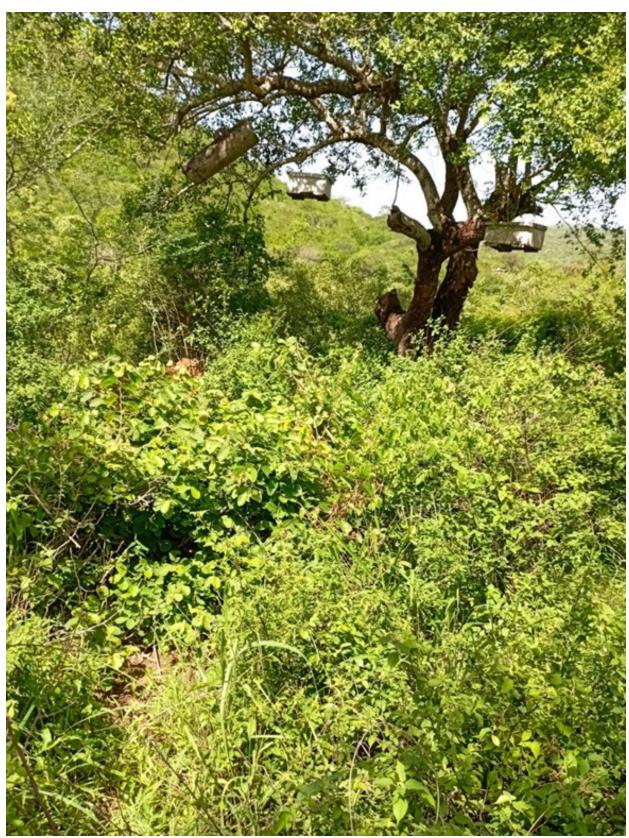


The figure shows vegetation at study site one.



The figure shows the researcher during data collection





The figure shows some of the hives at the study site



The figure shows a researcher with a botanist during data collection.





The figure shows excessive cut down of plants for charcoal production at the park of a mountain in site one.



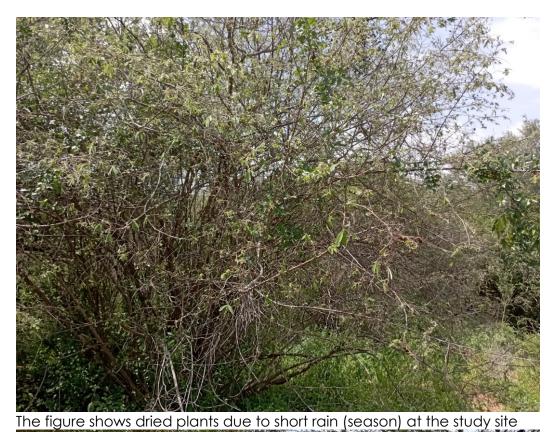
The figure shows plant species that were flowering during the short rain season.



The figure shows the boundary of Mkomazi national park, where data collection for some of the transects was conducted alongside the park.



The figure shows some of the hives at study site two.







The figure shows some cattle keepers moving with their cows from different places searching for pasture.



The figure shows a researcher during identification of plant species at one of the formed quadrates.



The figure shows a honeybee that forage at one of the plant species at the study site.



The figure a sunflower plant that cultivated near the study site two.



The figure poster to identify the quadrate after data collection (AP2- site 2, T1- Transect one, P10, point ten), this was done to all sites and points.



The figure, one of the plant species with flowers identified in study site one.

Conclusion.

The process of data collection for phase was successful, and I am preparing for phase two data collection. More information and other related details will be reported in the project report to be submitted to RUFFORD.