Project Update: May 2023

1. In total, we recorded 78 individuals (standing populations) of the species during our trips to the site. This excluded juveniles who are less than 5 years old. Forty-three individuals (standing populations) of *T. gentii* were in a group of five species with seedlings growing under them, with the exception of about eight single standings. The group standings of the species had a closed canopy with an average height of about 5 m. It was observed that the species occured below 800 ft. The mean density of regeneration per 100m^2 was 1186.4.

Talbotiella gentii tree population's sapling was 200 plants/ha and regeneration were 1,180 plants/ha as mean density. We recorded zero species on Off Reserves. This is a clear indication of how endangered this endemic species is in the communities around Bandai Hills Forest Reserve. This confirms the observation by IUCN that *Talbotiella gentii* is an endangered species.

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Figure 1A: Lead investigator recording the coordinates of T. gentii.

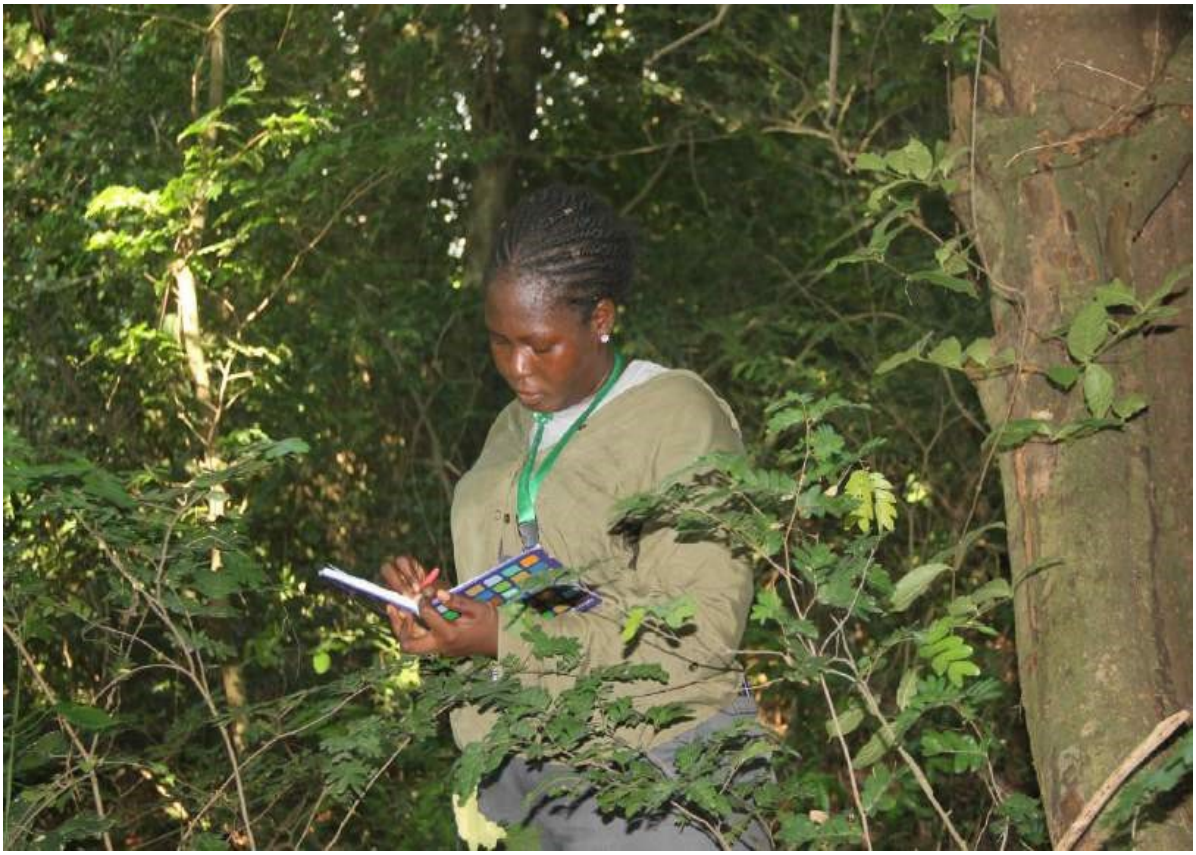


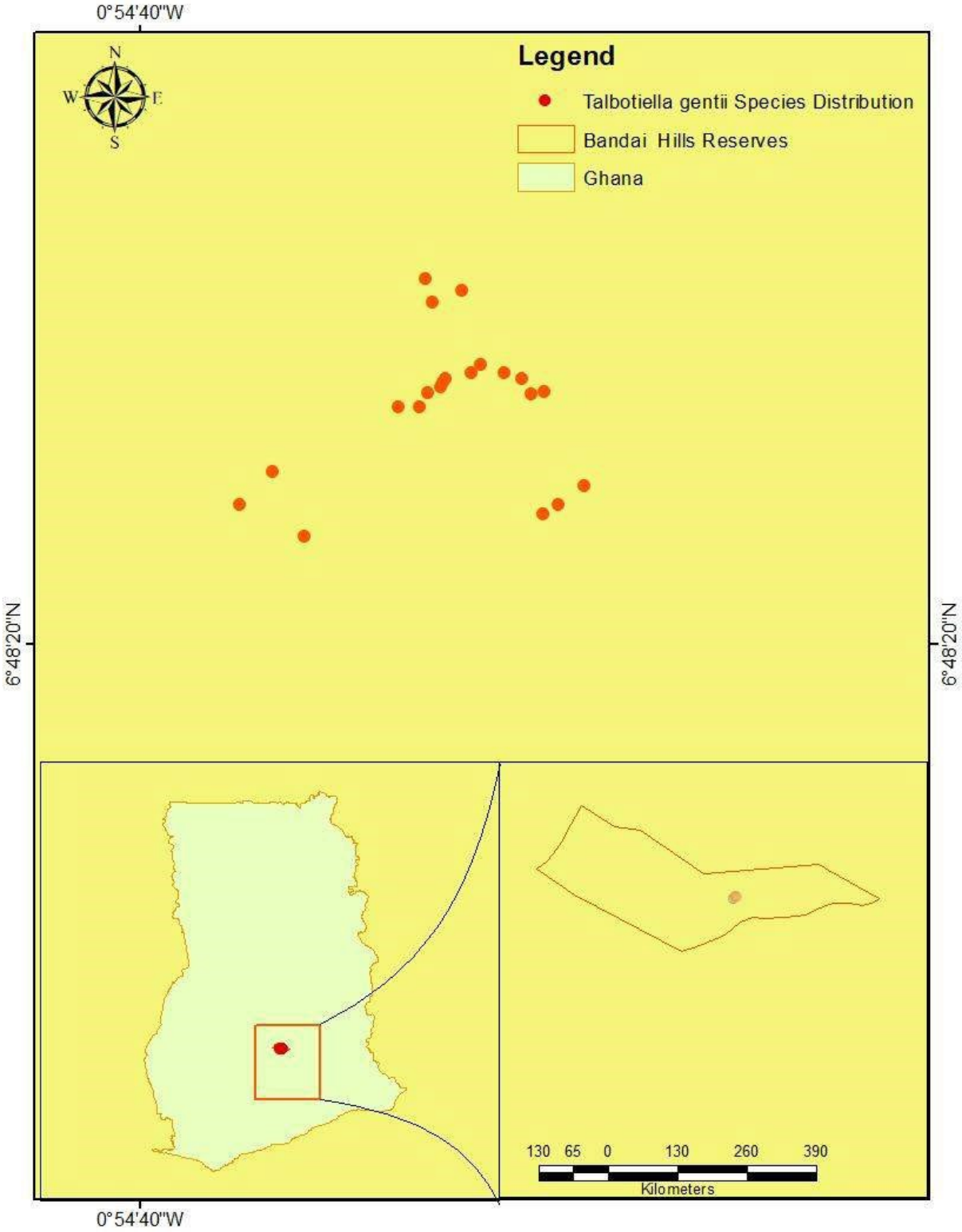
Figure 1B: Lead investigator recording the coordinates of T. gentii.

Figure 1C: Lead investigator recording the coordinate of T. gentii present in a plantain farm.

Figure 2: Sapling of T. gentii species surveyed at Bandai Hills Forest Reserve.

Figure 3: Regenerated T. gentii species.

Figure 4: Paper farm in the area of T. gentii in the reserve.



Map 1: Distribution of the T. gentii species in the Bandai Hills Forest Reserve

2. Local knowledge on the significance of the species and identify the threats to the species survival and growth.

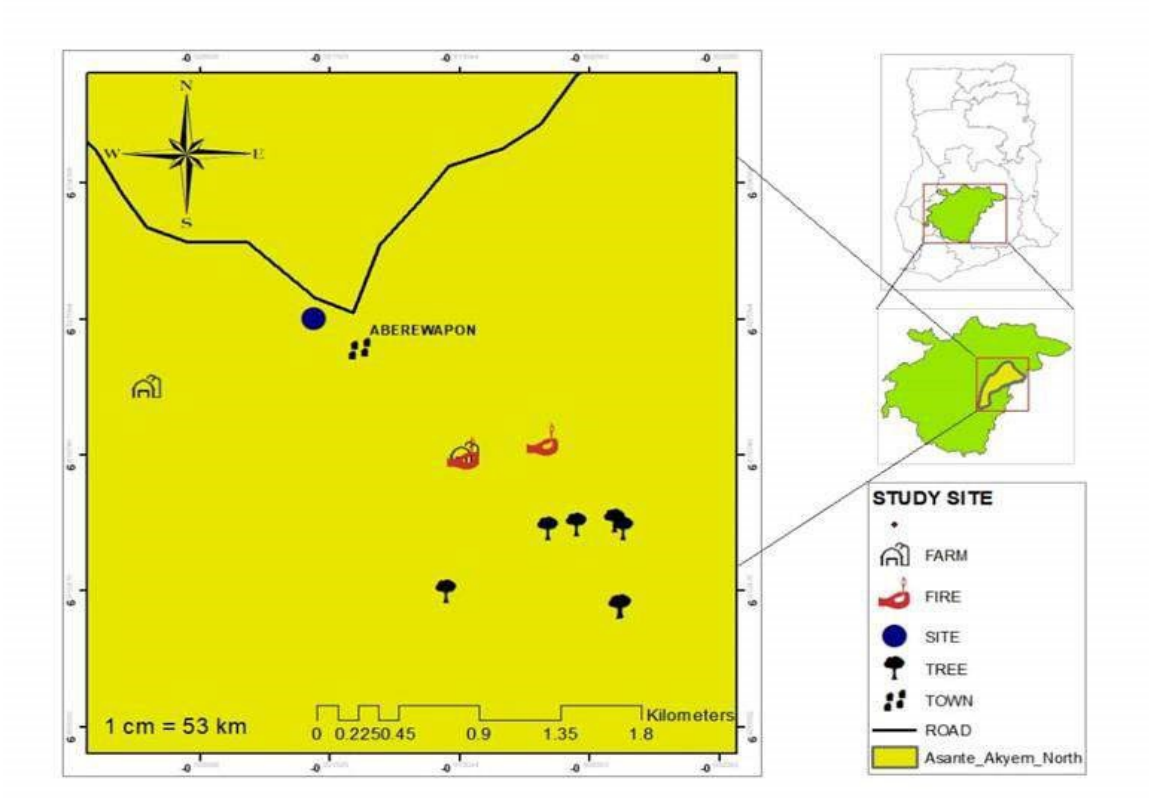
In our consultation with some of the elders of a fringe community, Aberewapon, we realised they have a fair idea about the species but was confirmed that some secretly cut the species. However, they are always caught and hang over by the authorities

but later no punishment is merited to the culprits. This is encouraging because the knowledge level might be promising for the conservation of the species. For example, one said that the species hardly do well in sunlight and prefer shady areas but do well in rocky environments. It was known through consultation with the elders that the season for which you can get seeds is the June/July raining season.

3. Threats to the survival of the species.
We recorded farming as the major issue and threat to the survival of the species which we became aware of through consultation with the elders and other key community members. Large areas of the species habitats have been pulled down for the production of crops especially watermelon, maize, pepper, plantain and tomatoes. After farming, wildfire is the second threat to the *T. gentii* survival. It was confirmed from the local people that, it is mostly in the dry season and initiated by Fulani men (herdsmen). Most parts of the reserve have been used by Fulani herdsmen to graze hundreds of cattle. The herdsmen usually set the forest ablaze to create more grazing space and to quicken the growth of lush grass for their cattle. Illegal logging is another threat which can potentially bring the existence of *T. gentii* to a halt. This has led to charcoal production in the communities. The good news is they do not for T. gentii for charcoal production anymore.


Figure 5: Aggregation (Group) of T. gentii species adjacent to a pepper farm.

Figure 6: Felled Ceiba pentandra in the habitat of T. gentii.



Map 2: Map of some selected coordinates of the mature tree as against fire outbreak.

Figure 7: Fire outbreak in the habitat of T. gentii.

Figure 8: Survey site showing the extent of a fire outbreak.

Figure 9: Charcoal bags packed under a tree in Abrewapong community.

4. Habitat restoration and school's outreach

During December 2021, the expected of the species was that it will start fruiting, but unfortunately it did not. So, we did not get seedlings to be harvested for nursery. However, we harvested seedlings which were regenerated about a year ago under the species standings. We planted about 800 nursed seedlings in the June/July 2022 raining season. They were interplanted with plantain suckers which the plantain give water to the planted *T. gentii* species during tree season.

Figure 10: A recruited team member from the community educating the students about the importance of trees.


Figure 11: A member of the team planting T. gentii.

Conclusions

This project confirmed the presence of *T. gentii* in the Bandai Hills Forest Reserve but in low numbers with farming and wildfire as the major threat to the species survival. The project has also brought together local community support for plant conservation through its conservation education campaign in the area. Continuous conservation awareness campaigns within these and other fringe communities are necessary to gain more support for protection of the species.

Acknowledgement

First of all, I would like to thank The Rufford Foundation for the financial support in the successful realisation of the all the objectives of this project. We also equally are thankful to the Juaso District Forestry Office for granting us access to the Bandai Hills Forest Reserve, not forgetting the services rendered to our team by the field guide to the successful completion of the project. We also thank the chief, elders, assembly members, church ministers and all people of Aberewapon and the entire Akyem East District for making the project successful.