Project Update August 2024

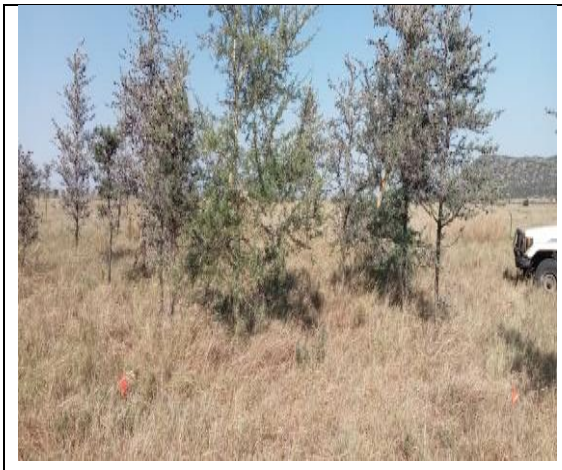
In our previous study we found woody plant encroachment affects both herbivore and vegetation structure and composition, which in turn might lead to different deposition of gastro-intestinal parasites that are mainly passed through dung piles onto environment. Yet differences in vegetation structure i.e., canopy cover, stem density and percentage grass cover reduce sunlight radiation reaching the herbaceous/grass layer and soil, consecutively reducing moisture in grass, dung and soil that are necessary for the development and survival of parasites with environmental stage such as nematodes. Furthermore, intensity of use by herbivores beneath tree shades have been found to be higher (Treydte, Riginos, & Jeltsch, 2010). This report describes field assessment of impact of woody encroachment, and tree canopies on pastures nematodes.

1. **Monitoring activities**

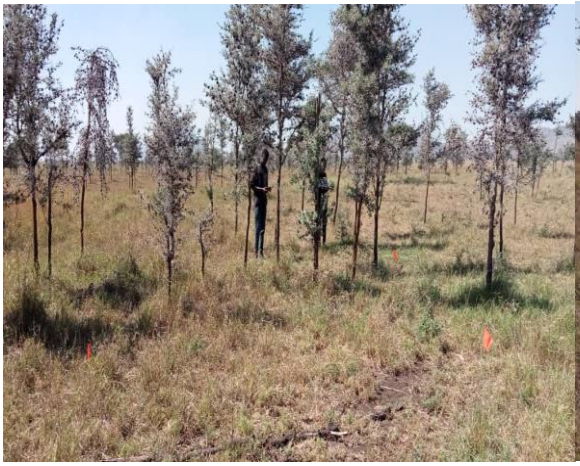
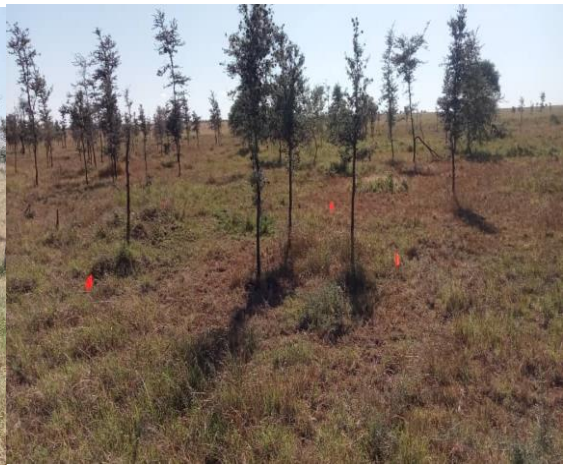
S/N	Activity	Place	Date/Time
01	Project progress presentation at College of African Wildlife Management, Mweka	Zoom	30 November, 2023
02	Lab talk at Glasgow university	Garscube campus	28 February 2024
03	Project progress presentation at University of Georgia	Zoom	1 May2024
04	Presentation/ Talk in Diseases and Ecology Special Interest Group – University of Glasgow	Graham Kerry Building	18 July 2024
05	Supervision of fieldwork implementation in Serengeti	Zoom, emails and WhatsApp	June to August 2024

2. **Fieldwork progress**

In reports submitted from August to November 2023, I have described the experimental approach of the study designed and implemented to study how tree canopy shade provides micro-climate on nematodes in pastures. This report describes observational part of the study, where we conducted field sampling of pasture from encroached sites to assess impact of woody encroachment on pasture larvae.




Sampling of pastures from woody encroached areas in Serengeti National Park

Plots establishment process in woody encroached sites for assessment and sampling of pastures


Assessment and recording of selected parameters from woody encroached sites

Team members

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1. College of African Wildlife Management, Mweka
2. EEID project- University of Glasgow
3. Tanzania Wildlife Research Institute (TAWIRI)