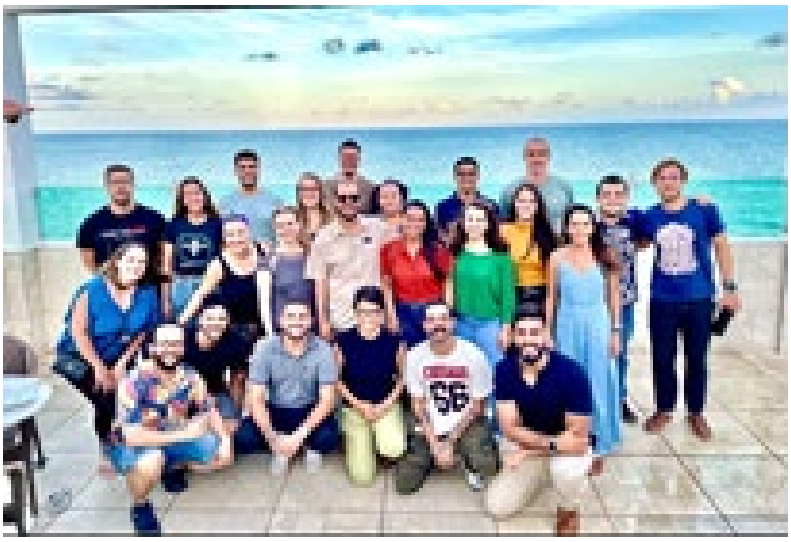
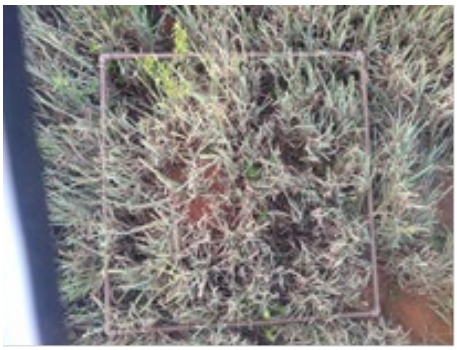
Project Update: May 2022

First of all, I would like to thank the foundation for the opportunity to be part of The II Rufford Conference for Biodiversity Conservation projects in Brazil. It was an amazing experience! We made important contributions to each other's projects and were able to expand our network of collaborations. Indeed, some friends that we made will contribute to a part of our project and this is incommensurable. I hope further projects have the same opportunity to participate in such a wonderful event.



About the fieldwork and data collecting - Last month we received Professor Matias Zarucki from Institute Arayanes - Uruguay - who helped us out in field work campaigns and activities. We were able to identify plants and to improve our methodology of collecting environmental data (at the small scale) within transects and squares of 1m². Such information is quite important for small organisms like dung beetle.


(First photo - left Professor Matias Zarucki and right me :); second and third photos are vegetation structure sampling (Licuri palm - Syagrus coronata); last two photos are 1m² for herbaceous cover sampling)

Our achievements:

With great pleasure I share that we successfully located 25 potential areas. Those areas satisfactorily match the criteria for landscape metrics gradient and local management, which are important to our statistical and ecological analysis and interpretations of data. Out of 25 ranches, we sampled five in full aspect - which means dung beetle sampling; environmental data (vegetation structure and composition); and local management data (via a questionnaire). Another five ranches had only local management data collected. And all areas were visited, confirmed and GPS coordinates collected. All permissions were obtained. New fieldwork is on standby due to a massive quantity of rain in our region (which is good news, because the Caatinga depends on this rainy season) but we are not able to access many areas due to the conditions of rural roads. Because of that I'm working on other virtual activities and preparing for when the rain ceases, at least a bit.

Our dung beetle collect methodology was successful. We were able to collect beetles even during days with plenty of sun, which is a true challenge in either arid or semi-arid regions. An unexpected number of specimens were collected (~300/trap) or nearly 2000 per area. This number of organisms per trap is higher than we have found in traps collected at the Atlantic Forest in the South of Bahia (personal data). Dung beetle diversity is also extraordinary - I believe we have collected at least 20 species so far. But we expect even more species after we collected in the Federal Reserve. We are also in contact with a taxonomist on dung beetles (Scarabaeidae) who will help us out on an accurate identification.


(First photo - our adapted methodology, a pitfall trap baited with a suspended bait and a "roof" to avoid dry and inundation; second one - collecting dung beetles - below the bait a fully cup with dung-beetles).