

This document is the fifth quadrimester report presented to the Rufford Foundation regarding the 1st Rufford Small Grant received to provide resources for the project “Defining an ecological corridor in central Brazil using mammalian and fire dynamics data” by Filipe Guimarães Lima.

- Fieldwork updates

The first field campaign of 2025 happened from February 10th to February 22nd, and the second happened from May 5th to May 17th, in which team traveled across the study region visiting all the sampling stations, changing the batteries and SD cards of the camera traps. The help of the fire brigade of Aliança da Terra has been fundamental to the success of each fieldwork (Figure 1, Figure 2, and Figure 3), along with having an appropriate car to go through the rough terrain, especially in the rainy season, making the car rental key for the success of this project (Figure 2 and Figure 3).



Figure 1. Research team of the field campaign of February, from left to right in the first picture: Vitor Gabriel Adorno and Aline Lopes (undergraduate students, Universidade Federal de Goiás), Isabella Tahyana Bravo (Master’s candidate, Universidade Federal de Goiás), and PhD. Cristiano Machado Filho (Universidade Federal de Goiás) in a rural area of Água Limpa, Goiás. From left to right in the second picture: Aline Lopes, Matheus Cardoso dos Santos and Juliano Lopes (fire brigade, Aliança da Terra), Cristiano Machado Filho, Isabella Tahyana Bravo, and Vitor Gabriel Adorno.



Figure 2. Camera trap maintenance by Isabella Tahyana Bravo (Master's candidate, Universidade Federal de Goiás) and PhD. Cristiano Machado Filho (Universidade Federal de Goiás), and pickup truck rented for the field campaign in February.



Figure 3. Research team of the field campaign of May, from left to right: the volunteers Esther Duarte Toledo e Silva (undergraduate student, UniEvangélica), Yasmin Ferreira Oliveira (biologist, Universidade Federal de Goiás), Gabriela Soares Lima Rabelo (undergraduate student, Universidade Federal de Goiás), and PhD. Cristiano Machado Filho in a rural area of Água Limpa, and pickup truck rented for the field campaign in May.

We have found interesting mammal records, such as the hoary fox (*Lycalopex vetulus*), a rare species endemic to the Cerrado, hardly recorded in our sampling stations, and a crabbing-eating fox (*Cerdocyon thous*) recorded in PESCaN (Figure 4). Although being common, this record of the crab-eating fox reveals a furless individual, it probably has alopecia due to contact with domestic dogs. It is known that domestic dogs have ease access to the park which is next to rural properties and cities where the dogs come from. On my PhD thesis I will approach the relationship between domestic dogs and their impact on native mammals, and the recordings we are getting from the monitoring are promising to perform analysis of density and domestic dog population.



Figure 4. Canid species recorded: hoary fox (*Lycalopex vetulus*), in a rural area nearby PESCaN, and a crabbing-eating fox (*Cerdocyon thous*) with alopecia in PESCaN.

The Goyazes Program from the Goiás State Government through the State Culture Department enabled the production of the documentary “Um parque para viver” (*A park to live*, in English) made by Diogo Diniz Garcia (available at: https://www.youtube.com/watch?v=wxbYp_Iklxc). The documentary discusses the role of the state parks in biodiversity conservation and their importance for local cultural traditions, and the initiatives and research projects that occur in them. The “Bandeiras no Corredor” project is mentioned with speeches by Maurício Tambellini, chief of both PESCaN and PEMA, Alessandra Bertassoni and Paulo De Marco, my advisor and co-advisor, respectively, and Caroline Nóbrega, president of Aliança da Terra. The film premiere happened on February 5th in PESCaN’s auditorium, being attended by environmental professionals, park staff, and members of the community (Figure 5). The team was invited to watch the exhibition of the documentary on February 21st, as well as students and locals.



Figure 5. Promotional poster of the documentary “Um parque para viver”.

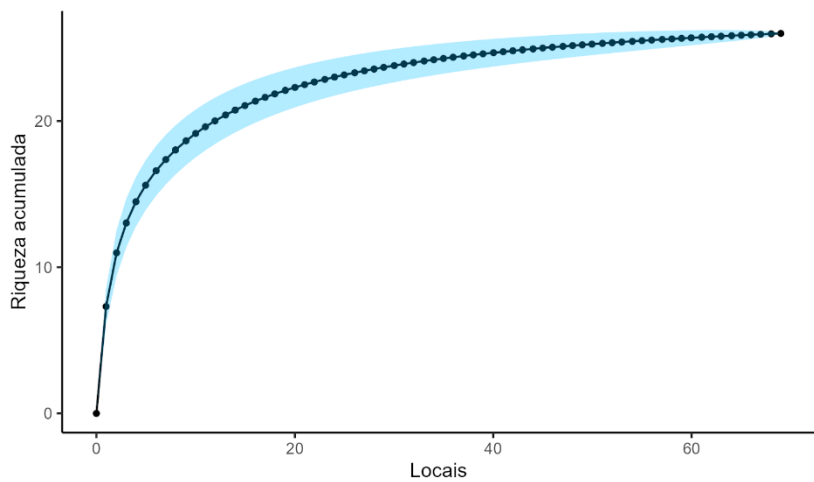
- Paper for publication

A group of researchers, decision-makers and managers (PhD. Cristiano Henrique Machado Filho, PhD. Alessandra Bertassoni, MSc. Filipe Guimarães Lima, PhD. Caroline Nóbrega, Paula Tambellini, Maurício Tambellini, PhD. Paulo De Marco), directly involved with the *Bandeiras no Corredor* project, have submitted a paper in policy forum format to the journal *Regional Environmental Change* (<https://link.springer.com/journal/10113>). In this paper we discuss the importance of integrating academic knowledge with management demands to be implemented by decision-makers having the *Bandeiras no Corredor* as an example. It was recently submitted, and we are waiting for the reviewers’ comments and suggestions.

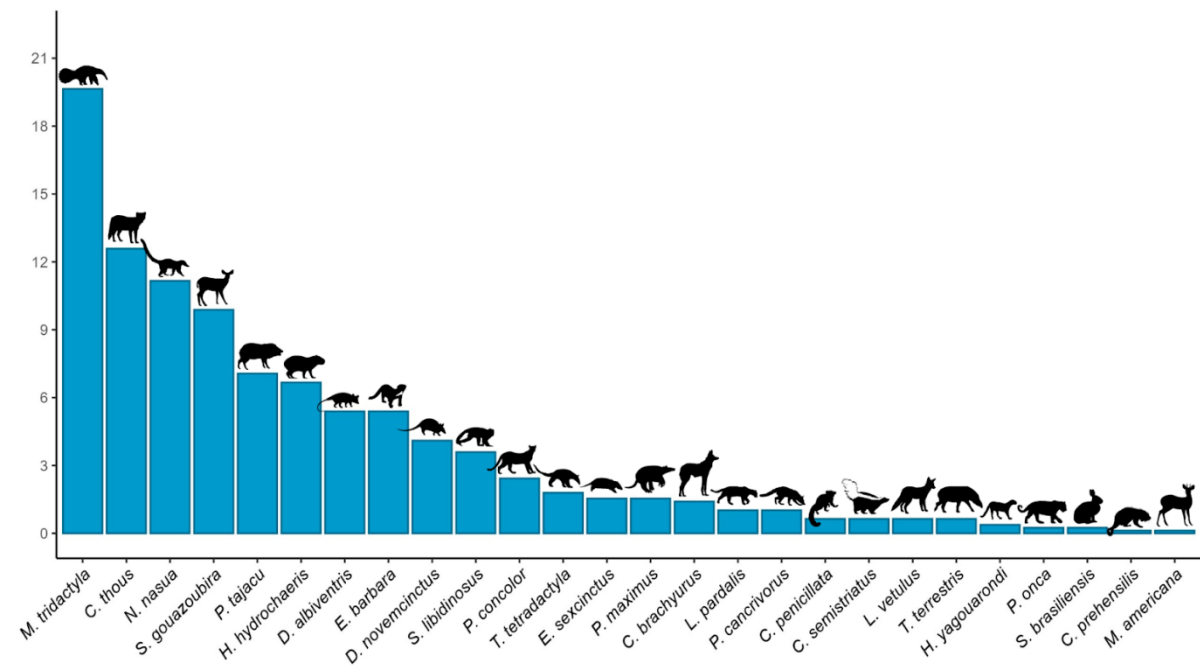
- Advising

The *Bandeiras no Corredor* is a great Project that has been generating a great amount of data, and some undergraduate students have been working with us, some of whom I advise and co-advise: Pedro Cordeiro and Mariana do Couto, mentioned in previous reports for being field volunteers. They are undergraduate students majoring in Biological Sciences and Ecology, respectively in Universidade Federal de Goiás (UFG). Pedro Cordeiro is investigating diversity patterns in the mammal community of the study region (the PESCaN, its surroundings, the corridor area, and PEMA) using beta diversity analysis, and his research will be presented in a conference in UFG in November. Mariana do Couto has developed her final paper, which will be presented next Friday, June 27th, reviewing the Management Plans of both PESCaN and PEMA following the orientations of the Methodological Guide, elaborated by the Chico Mendes Institute for Conservation (ICMBio, in Portuguese), to investigate if the plans are aligned with the guide, and how the medium-term monitoring made by *Bandeiras no Corredor* could contribute to the mammal species list previously provided by the Management Plans.

Appendices



Appendix 1. Accumulated richness of native species. “Riqueza acumulada” = Accumulated richness and “Locais” = Sites.



Appendix 2. Relative mammal species frequencies.