

This document is special 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.

We have successfully completed two-year monitoring, which was the initial goal. Some of the camera trap data are still being screened by our team, with expectations to be finished by the beginning of next year. However, with the data we have gotten so far, we were able to conduct some analysis and discuss the results which were presented by our team in the first Bandeiras no Corredor Workshop on October 4th and 5th. We left Goiânia with the team (students and Bandeiras no Corredor coordinators) in three rented cars for PESCaN, Caldas Novas, on October 3rd. In the following days we showed the results of our research to the SEMAD workers, landowners and the community, and discussed our findings, challenges and future perspectives.

- Day 1

On the first day we met with the SEMAD and PESCaN workers and collaborators, with presentations of post and undergraduate students of the Universidade Federal de Goiás – UFG (Figures 1 and 2).



Figure 1. Professor Alessandra Bertassoni opening the First Bandeiras no Corredor Workshop in PESCaN’s auditorium.



Figure 2. Students presenting their projects and results. From the left to the right: MSc. Filipe Guimarães Lima showing the aims of each chapter of the PhD thesis and some previous results; the ecologist Mariana do Couto Freitas presenting the research from which she developed her Final Paper; the undergraduate Pedro Cordeiro showing the results of his project where it was investigated biodiversity patterns in PESCaN and its surroundings, Corridor, and PEMA; the undergraduate student Vitor Gabriel Adorno Rezende presenting his results of identification of giant anteaters (*Myrmecophaga tridactyla*); the undergraduate student Aline Lopes presenting about the Bandeiras no Corredor on medias; the undergraduate students Isabella Bárbara Carneiro and João Guilherme Lemos presenting about the data screening processes; the MSc. Luiz Gabriel Dias presenting about his PhD thesis on environmental restoration in the Corridor; and undergraduate student Ana Paula Carlos Assunção presenting about mammal functional diversity associated with land use and cover.

The presenters were asked questions, the projects received contributions from the audience, especially from Professor Paulo De Marco and the PESCaN chief, Maurício Vianna Tambellini, and new ideas emerged, some of which are already being developed. Additionally, some of the undergraduate students presented in a local conference at Universidade Federal de Goiás in two PESCaN named CONPEEX that happened on November 4th to 7th (<https://22conpeex.plateia.ufg.br/p/54307-programacao-geral>). Two workers presented the internal subjects of the Park such as monitoring, management and the challenges concerning local conservation (Figure 3).



Figure 3. Anna Cecília de Souza (Environmental Defense Agent, PESCaN) showing the results of the internal species monitoring of PESCaN, and Paula Ericson Guilherme Tambellini (SEMAD/PESCaN) presenting about park management and environmental enforcement.



Figure 4. Bandeiras no Corredor team, PESCaN workers and collaborators (Aliança da Terra).

After all the presentations we divided ourselves into discussion groups in which discussions were about the impacts of the project and the perspectives for the future related to fieldwork, research, extension and applications (Figure 5). The ideas were registered and then presented to the whole audience by one representative of each group.



Figure 5. Discussion groups.

- Day 2

On the second day we received some of the landowners and their families that collaborate with our project with a breakfast get-together (Figure 6), and some members of the research group named Mammals of the Cerrado Conservation Program (PCMC, initials in Portuguese) that share the study area with us, part of the Corridor and PEMA



Figure 6. Breakfast with the landowners and families.

Professor Alessandra Bertassoni started the activities of the day introducing the project and the research to the audience (Figure 7), followed by the Park chief, Maurício Vianna Tambellini and the professor

Paulo De Marco (Figure 8). Conservation, animal welfare and conflict were discussed with the landowners, who demonstrated interest, making the interactions between presenters and audience dynamic (Figure 9).



Figure 7. Professor Alessandra Bertassoni presenting the Bandeiras no Corredor to the audience.



Figure 8. Maurício Vianna Tambellini and Professor Paulo De Marco talking to the audience.



Figure 9. A landowner interacting with the presenter (left) and a researcher of PCMC responding to a landowner about cattle predation by large predators (right).

The students Aline Lopes, and Isabella Bárbara and João Guilherme Lemos repeated their presentations to the landowners, and Pedro Cordeiro made a new presentation about the importance of the data in videos and what we can obtain from them such as rare behaviors, predation, parental care, and health conditions of animals (Figure 10)



Figure 8. Pedro Cordeiro presenting.

We finished the second day of activities giving the present landowners a partnership certificate, a symbolic gift for collaborating with our project through these years of monitoring (Figure 9)



Figure 9. João Guilherme Lemos handing the partnership certificate to a landowner.

- **Next steps**

The ideas and suggestions that oriented the discussions were registered and are being developed by the students and coordinated by Professor Paulo De Marco and Alessandra Bertassoni at Universidade Federal de Goiás, aiming the publications of papers and the production of reports for SEMAD. The collaborative group – SEMAD, UFG, and Aliança da Terra – are finding ways to keep the project going, and we hope to return the monitoring and field campaigns by January 2026.

Regarding to my thesis, I have been facing challenges with my statistical analysis, to adequately apply the right analytical method to my data – species presence and frequency, land use and cover, fire incidence and frequency, which are in different scales. I expect to solve such problems by the beginning of December. Once it is solved, it is just to include new data from the newest field campaign available. On December 18th it will be my doctoral qualifying examination in which I will provide a diagnosis of the domestic dogs of the study region and discuss dog management in natural areas. That concluded, I will formally request for extension of my oral defense due to the delay caused by my health issues. I hope to be able to complete my PhD in August 2026.