Update Report 41309-B

Robério Freire-Filho (April 2024 to August 2024)

Endangered Howler Monkey Conservation Project in Northeast Brazil: Population Dynamics, Anthropic Threats and Private Protected Areas

Despite the approval of our proposal at the beginning of the year, we only had access to funding in early April 2024. Since then, we have been developing related activities research, ethnobiology, environmental education and dialogue with landowners and public authorities. I will use "we" throughout this update report because this project is formed by a team.

Population estimates of target species

We have already contacted the authorities of all study areas and defined the linear transects. We have already purchased the audiomoths (open-source acoustic monitoring device that can record sound for long periods of time), but the time between the purchase and the arrival of this equipment in Brazil took a long time. Since it was an import, this procedure takes time. This has disrupted the schedule of activities, but we already have the equipment and will install it as soon as possible.

We have already installed camera traps in the canopy (Figure 1) and are monitoring two populations of caatinga howler monkeys (*Alouatta ululata*) (Figure 2). During the month of May 2024, two Portuguese biology students came to Brazil to learn about our project and how to study howler monkeys in the wild. They helped us install the arboreal camera traps, observed two groups of caatinga howler monkeys (Figure 3) and helped us with different fieldwork activities.



Figure 1 - A camera trap installed in the canopy of a tree.

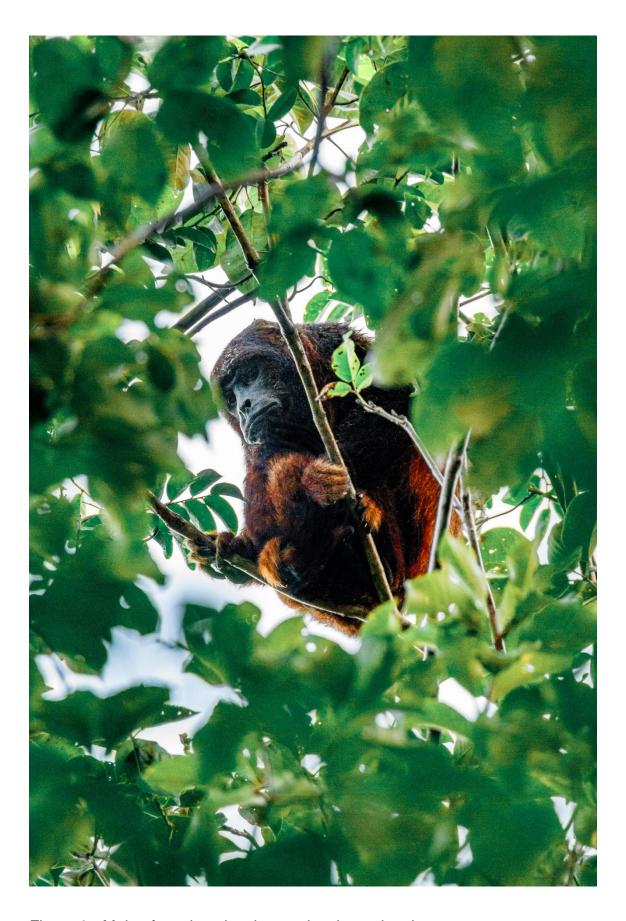


Figure 2 - Male of caatinga howler monkey in a rainy day.

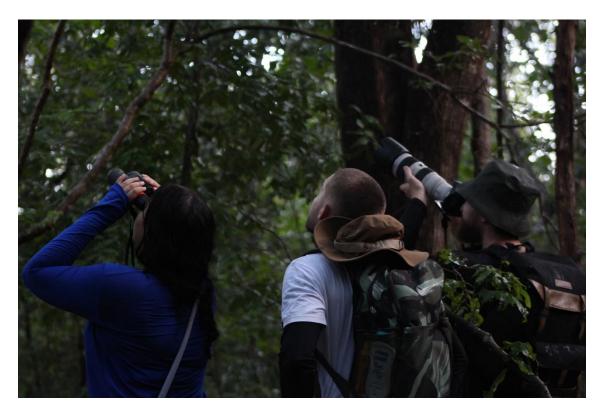


Figure 3 - Portuguese biology students observing a group of caatinga howler monkeys in the wild.

Ethnobiological data collection on target species

During this period, we also collected some ethnobiological data on the howler Monkey species. In total, 43 people were interviewed. This will help us understand the relationship between local community members (Figures 4 and 5) and primate species and the factors that threaten these species.



Figure 4 - Dialogues between students and members of local communities, one of the ways to obtain important information about primate species and encourage the exchange of knowledge.



Figure 5 - Vaqueiro, an emblematic figure of the culture of the Northeast of Brazil. A central worker on a farm or place where various animals are raised (for

example, cattle). They are responsible for taking care of these animals, ensuring the smooth running and operation of the farm.

Throughout this ethnobiological data collection work, we are identifying and building relationships with stakeholders (Figure 6). In this way, we are developing workshops to train guides and local community members to promote primate watching activities in the protected areas.

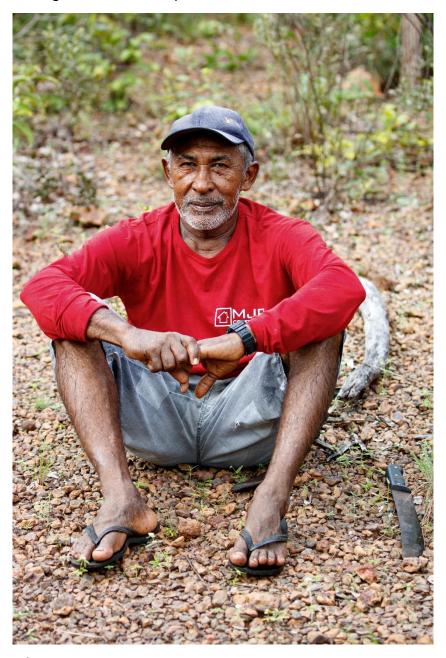


Figure 6 - Zé Raimundo, an important stakeholder.

Environmental education activity

This is the activity that is furthest along in our schedule. Thanks to partnerships with other research groups in the region, we have been able to carry out several environmental education activities in six schools in the region.

Reaching around 450 people, including children, young people and adults (Figures 7 and 8). These partnerships with other initiatives in the region are a very important tool for carrying out different activities in our project. Once again, we are working on creating workshops to train guides and local community members to promote primate watching activities in the protected areas, following the norms and good practices for primate watching.



Figure 7 - Children, young people and adults participating in our environmental education activities.



Figure 8 - Children wearing masks representing the project's target species. These masks were made by project members.

Dialogue with landowners and government authorities

During this initial period of the project, we identified two landowners who are interested in creating Private Natural Heritage Reserves (RPPNs). We continue to work to identify new landowners who are sensitive to environmental issues and nature conservation. Regarding government authorities, we have already contacted the managers of the conservation units where we will develop activities and we have also contacted public managers from different municipalities in the region.