

Project Update: January 2019

Achievements to date:

- Collecting data from the woolly monkey population at Cueva de los Guácharos National Park.

Fully achieved - From January to July 2018 we had a very good fieldwork experience. We included two field assistants who learned a lot.

- Continue with the collection of data from August to December 2018

Partially achieved - From August to December 2018 we also did a very good job, but we had some setbacks that I will explain further in the report.

- Beginning to extract DNA from fecal samples.

Partially achieved - The DNA from the scats of the fieldwork period has been extracted, but we still need to extract the DNA of the samples from the second period.

Difficulties to date:

From the first period of the project there were not many difficulties with the project, but at some point the field assistants, Marcela Ramirez and Michelle Guevara, did not spend much time in a field station that does not have internet and where it is very difficult to communicate with mobiles as the signal is quite bad. They felt like they were disconnected from the world and it was more difficult to keep them motivated. So we talked about it and they went out from the field station to their homes for one week, at different periods of time so we did not have to stop the project for some days, in order they could "recharge their batteries", and it actually worked very well. They came back highly motivated and improved incredibly at the end of the project. Both progressed considerably their skills. Michelle became very good at identifying plants and Marcela improved so much collecting data from the monkeys.

In the second period of the project it was difficult to involve field assistants; we opened a call, with interested people applying, but many rejected the position as we could not offer a salary. That brought the inconvenience that in August 2018 we could not collect the necessary samples for our minimum threshold. We included two field assistants, Kaylie McNeil and Nicolas Corredor, and both were good at collecting data. But at the end of October 2018, Nicolas resigned because his grandfather was very sick and could die in the next few days. This left more work for the other field assistant and myself. We could manage to be proficient at collecting data, but of course our sampling effort decreased considerably after losing Nicolas.

Outcomes so far:

So far we only have the raw data; we have finished making the database and we are beginning to analyse the data and extracting the DNA so we can begin with molecular procedures to know what the woolly monkeys are eating. That means that so far we do not have any results from the project yet.

Nevertheless, I think that the fieldwork was very successful. We collected over 250 scats which will help us in identifying the diet of the monkeys. It was very challenging that at some points we had to do multi-tasking to complete the goals of every month but in the end we were all capable and willing to put a little more effort to accomplish the goals. After speaking to each field assistant, they felt that they have improved their knowledge and some of them got very interested in and were willing to continue doing research on monkeys, plants or conservation.

Sharing results:

Local communities were very involved in several aspects of the project. When we asked for groceries, we had to hire local people to bring the food to the park which helped them a lot in their incomes. With the ecotourism guides we talked fluently, they got very interested in the project and included in their talks as to why primates are important in the forest dynamics to conserve or reforest an area. Also, when local universities or tourists that got interested in our work visited the park, we gave small talks about what we were doing and the importance of the area we were working.

So far we have two ways of sharing the results. One will be at the presentation of the master's evaluation and the second one will be divided in two: first, we will present the results at the office of national parks with the local community involved and also we are planning doing something to share this results with the kids from the nearby areas but in a more dynamic and fun way for them; second,, we plan to publish the results on open access journal so more scientists that are interested in the subject can read our work.

Timescale:

The Rufford grant has been used for the 2018 fieldwork and it will be used also throughout 2019 for some reagents to process the samples and also for the activities of sharing the results with kids and local community.

In terms of the length of the project, we planned to collect samples only until July but we managed to save a considerable amount of money from the grant and we decided to extend the sampling until December 2018. The reason behind this was that if we sampled the whole year, the study would be more robust, especially for the data we could collect and that we could be able to understand more about the woolly monkey's diet, which means also that after making this decision, for sure the study will have a greater impact than we previously thought.

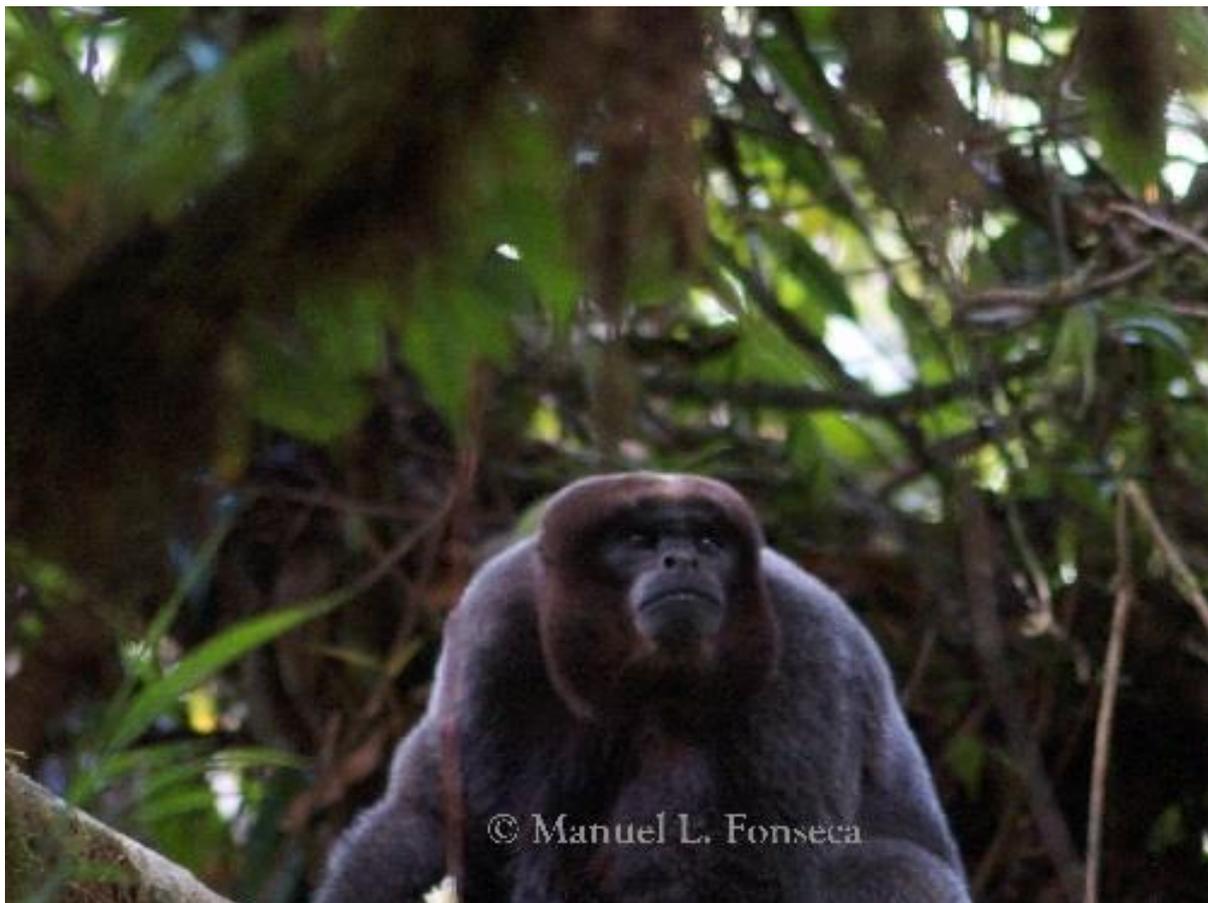
Plans and Next Steps:

We are still working in the project to obtain the results from the collected data. So right now I would not dare to say what we could do afterwards in terms of continuing research or working with the communities at this study site.

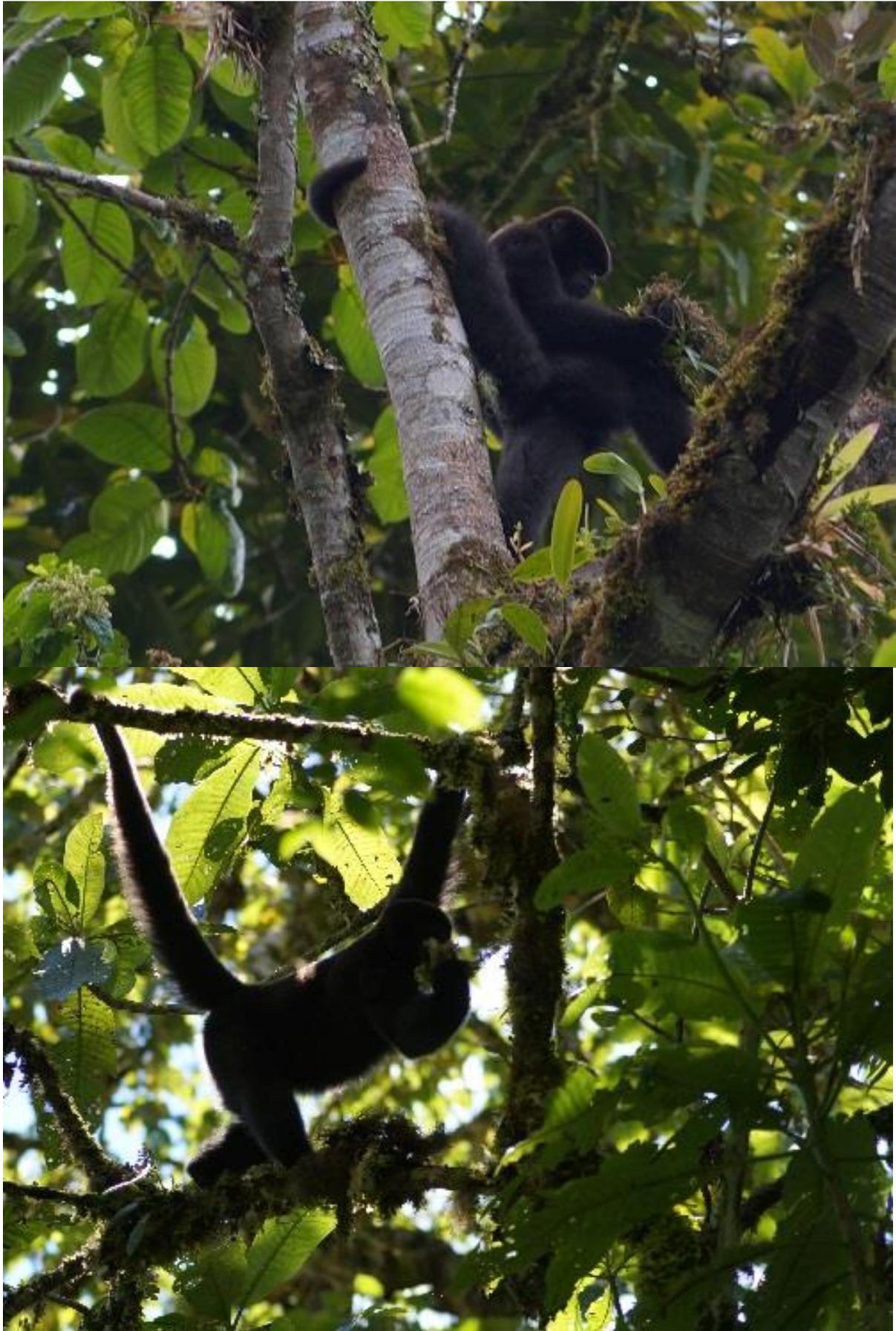
I feel that it is very important to communicate this type of results to a broader audience and after talking with tourists during my fieldwork I realised that they can be very interested in these sorts of topics but this information is rare to see in their daily lives. So I think it is a vital step to follow, I still do not know how, but I have been

thinking a lot lately in this, and as how I see it, this can be a very powerful way to connect people with science and make them feel more interested in conservation.

Looking ahead from this project we also need to continue doing research at this site. I think that we still have so much to learn from these wild woolly monkeys, and although in the laboratory I am right now we have been working continuously for a little more than 8 years, and that has brought amazing results for an understudied critically endangered species in an area with little human intervention. New students have begun to work in new areas with different monkeys that are in fragmented areas or with a project of reintroduction of woolly monkeys, which means that unfortunately for the near future we may not have students or financial resources to continue doing research at this study site.



Male is vigilant while resting



Juveniles are foraging for insects



Natural Bridge at Cueva de los Guácharos National Park