

Project Update: September 2023

Project Status: All the main activities that have been planned so far have either been completed or are in progress. The reforestation has been far more successful than expected with a very high survival rate of saplings. Some school visits have been interrupted by poor weather, meaning that school is postponed, or the roads are not passable, but the visit is always carried out at the next possible opportunity.

Economically Beneficial Reforestation

A community meeting was held in March 2023 to inform the Mberu Pirapo'i that our collaborative project had been funded and how we would proceed. Planting was carried out during April and May 2023. Saplings were sourced from INFONA (the National Forestry Institute) (1800 native tree saplings) and from a local private tree nursery in Itapúa (8000 yerba mate saplings and 3000 native tree saplings). The native tree saplings were of a mixture of 14 different species, all of which have been found to be beneficial to the hooded capuchin monkey (either as a food resource species or as a sleeping site). The national and international team of Para La Tierra (staff and volunteers) spent 5 weeks during April and May helping community members to prepare and plant plots with half yerba mate and half a mix of native tree species. The reforestation plots are not communal, and the community members decided amongst themselves who's land would be involved in this first round of planted. In total we planted over 13,000 saplings so far. This will benefit 18 families and the Mberu Pirapo'i school.



Unloading the saplings into the temporary tree nursery.



Planting saplings.



Yerba mate sapling.



Temporary tree nursery in Mberu Pirapo'i



Mbya Guarani woman planting yerba mate.



Children from the Mberu Pirapo'i school helping plant trees.

By the end of May 2023, we had successfully planted just over 6 ha of unused and previously completed deforested land. By July 2023 the saplings had a survival rate of over 95% with only two plots showing any sort of loss. By the start of September 2023, the overall sapling survival had decreased to about 90% as the result of a bushfire that got out of control and destroyed part of one of the plots.

In late September 2023 we will measure the growth of the saplings as during the cold months of June and July we would not expect significant growth. In addition to the 14 native tree species, we also provided participants with native fruit tree saplings and avocado tree saplings (native to Paraguay but to a different region).

Environmental Education and Teacher Training

Lessons so far have focused on Paraguayan primates, primate diets and the importance of forests for wildlife. Teachers have been actively participating in all lessons in order to gain experience of the participatory methodology.



Learning about monkeys with the Mbya Guaraní children.



Class at La Esperanza school



Deforestation game at Mberu Pirapo'i



Learning about different habitats animals live in at Mberu Pirapo'i



Lesson in Arroyo Moroti Mbya Guarani indigenous school.



Lesson in Tagauto school. Ecotourism Training.

The first ecotourism training session was carried out with two community members in August 2023. Paul Smith, the director of the leading Paraguayan ecotour company Fauna Paraguayan the session explaining the ecotourism industry, what different types of tourists are looking for and how to run and price activities for tourists.

The first practice tour was given to a group of 20 US students brought by the Para La Tierra and Fauna Paraguay teams. To date the tour guides have seen their income increase by between 25 and 50% per month, depending on the number of visitors to the reforestation plots.

The next stage is the creation by the community of a tourist trail with signage that will incorporate social elements of the community, reforestation plots and the remaining forest present on the community's land.



Mbya Guaraní guides training with Fauna Paraguay ecotourism specialist.



Practice tour of the reforestation plots (accompanied by children from the school).

Monitoring in San Rafael (Tekoha Guasu)

To date 2,193 camera trap nights have been carried out in the Nueva Gambach property of San Rafael. Our species list (medium and large mammals only) is now at 18 species.

1. Neotropical Otter (*Lontra longicaudis*) NT
2. Margay (*Leopardus wiedii*) NT
3. Oncilla (*Leopardus guttulus*) VU
4. Hooded capuchin monkey (*Sapajus cay*) VU
5. Jaguarundi (*Herpailurus yagouaroundi*) LC
6. Paraguayan hairy dwarf porcupine (*Coendou spinosus*) LC
7. Azara's Agouti (*Dasyprocta azarae*) DD
8. Tayra (*Eira Barbara*) LC
9. White eared opossum (*Didelphis albiventris*) LC
10. Black eared opossum (*Didelphis aurita*) LC
11. Nine banded armadillo (*Dasypus novemcinctus*) LC
12. Greater naked tailed armadillo (*Greater naked tailed armadillo*) LC
13. Crab eating fox (*Cerdocyon thous*) LC
14. South American Coati (*Nasua nasua*) LC
15. Red brocket deer (*Mazama americana*) DD
16. Spotted Paca (*Cuniculus paca*) LC
17. Crab eating raccoon (*Procyon cancrivorus*) LC
18. Tamandua (*Tamandua tetraactyla*) LC

Several species of small rodent have been recorded on the cameras, but it is not possible to identify them. Domestic dogs have only been recorded a handful of times and to date there are no records of hunters or loggers on the cameras, though signs in the forest (such as the remains of cooking fires) have been observed. Large mammal species that have been recorded by observation or sign (scat or footprint) only include the puma (*Puma concolor*) LC, Brazilian cotton tailed rabbit (*Sylvilagus brasiliensis*) EN and the black and gold howler monkey (*Alouatta caraya*) NT. The Mbya Guaraní community of Arroyo Moroti reported the presence of three jaguars (a mother and two older cubs) on their property to the north of Nueva Gambach while I was visiting the school, but these reports have not been confirmed. If accurate these would be the first report of jaguar in San Rafael in many years.



○ 32 °C 89 °F 20/03/2023 15:07:00 0062

Hooded capuchins investigating a camera trap (that they had previously untied from the tree).



○ 6 °C 42 °F 15/07/2023 08:22:58 0039

Jaguarundi in Nueva Gambach



Porcupine in Nueva Gambach.