

## Project Update: October 2022

To date the carried-out activities have been:

- **Deforestation affected sites selection:** a spatial analysis was carried out using satellite imagery. Using these analysis sites close to streams presented different vegetation cover such as forest, pastures or crops was selected. A total of 28 possible sites were selected.

Once in the field, we visited the 28 possible sites to present the project, ask permission of landowners and corroborate the results of the spatial analysis vegetation cover. We were able to obtain permission to sample 15 sites. Sites were classified as follows: 1. Highly deforested, where more than 80% of the vegetation cover in a buffer of 100 m was lost; 2. Mid-deforested, where 40 to 80% of the vegetation cover in a buffer of 100 m was lost; and 3. Low deforested, where less than 40% of the vegetation cover in a buffer of 100 m was lost.

- **Sampling:** a stretch of at least 200 m was established within each stream. We closed both ends of the stretch (upstream and downstream) using a gill net to stop fish escaping. Three consecutive passes using a 25 x 2.5 m seine were carried out to sample the fish community. Additionally, hand nets were used to sample difficult to reach sites such as tree roots, fallen logs and macrophytes. Captured fish were deposit in storage bins with oxygenated water while being identified, and then returned to the stream. Specimens from each species were collected and brought to the lab for further analysis.

Within each stretch physical-chemical parameters were sampled using a Hach multiparameter probe, depth readings were taken using a depth sounder (hondex) and canopy cover was measured using GLAMA app.

- **Laboratory work:** fish identification was corroborated through the examination of specimens under microscope. The stomach was dissected and deposited in identified separated glass vials containing ethanol for further stomach content analysis. A sample of tissue was obtained for further analysis as well.
- **Project socialisation:** the project was presented to landowners, community leaders and government entities such as Parques Naturales Nacionales de Colombia and Instituto Amazonico de investigaciones cientificas (SINCHI).
- **Future activities:** a second field trip is planned to take place in January 2023 to obtain data during the dry season at the same 15 sites; the same sampling techniques will be applied. A report presenting the partial results will be handed to landowners, community leaders, community members and government entities. Laboratory work will continue, and results will be presented next year in the VI zoology congress of Colombia (March) and if possible, in the VI ichthyology congress of Iberia in Spain (May).



Fish sampling



Physical and chemical parameters sampling



Field workstation