

Project title: “Human – Wildlife interactions into the Podocarpus - Sangay Conservation Corridor, Andes of Southern Ecuador: A socio-ecological and geographic characterization”

Manuel A. Morales Mite
MDP Student – Cohort 9

Location: Andes of southern Ecuador
Dates of funded research: May the 14th to August the 2nd, 2019

Background

The proposed project aimed to describe the social and ecological dimensions of the developmental and natural resources management in the Podocarpus - Sangay Connectivity Corridor (PSCC), a big, 500,000 ha region, encompassing several small protected areas and human-modified landscapes, connecting two core zones: the Sangay National Park (north) and the Podocarpus National Park (south).

The connectivity corridor is a managerial category not still formally recognized for the Ecuadorian government, and the gathered data will be applied towards a formal recognition goal.

The main objectives were enhancing the current understanding of the local stakeholder’s perceptions about the presence of wildlife and natural protected areas in their near vicinities, through workshops, interviews and participatory methods, and linking these perceptions with distance to protected areas and its size, which are both predictors of large wildlife populations presence. I also mapped out the potential conflicts detected, between the human property (livestock, crops) and wild animals, and its possible relationship with the presence of natural vegetation cover.

Summary of Activities

I conducted field activities based in Nature & Culture International (NCI) office, a local NGO which served as Host Organization, providing working space and logistics. The present research was framed into the Podocarpus-Sangay Connectivity Corridor Initiative, led by NCI, which is teaming up with the Ecuadorian Ministry of Environment (MAE) and a number of local authorities (GADs) towards the recognition of the corridor as a managerial category, through policymaking and supporting several research activities related with biodiversity conservation and social development.

A set of participatory methods were developed before the field trip, and included: an interview questionnaire, for addressing local people’s perceptions about wildlife, protected areas, environmental authorities’ performance, and biodiversity use. A survey form was initially developed for obtaining information from key stakeholders and was intended to be distributed on-line. To assess local people’s understanding of their environment, we proposed to conduct participatory mapping in selected areas.

The aforementioned methods were validated during an expert's workshop held in Cuenca in one of the first weeks of the practicum. This event was attended by local experts, environmental authorities and technicians, coming from all the geographical context encompassed by the Corridor. During the workshop, the proposed methods were discussed and the participant's observations were posteriorly incorporated into a final proposal obtained by consensus. Based on the experiences of the assistants, three geographic regions into the corridor were identified, and the posterior research efforts were focused on them. These regions were the Collay Preserved Forest (northern Andean region), the Northern Podocarpus buffer One (Andean southern region) and the Gualaquiza-Limon municipalities region (Central-Eastern lowlands).

In parallel, I held meetings with local experts in biodiversity conservation and monitoring, bear and jaguar conflict, and ethnographical survey. The regional prioritizing process ended up with the identification of seven municipalities for the fieldwork to be conducted. During the experts workshop, a similar project was identified, aiming to identify uses of wildlife and human-wildlife interactions, in several settlements in the northern Podocarpus National Park buffer zone; therefore, a considerable effort was made for coming up with a unified methodology in terms of the content of the semi-structured interviews, in order to make the data of both projects comparable. Accordingly, this region was not covered by me to avoid duplicating efforts.

The next step was contacting the six northern municipalities and engaging them into the monitoring program. With the support of MAE and NCI, we obtained the participation of all of them and several other key stakeholders working on the region on conservation and managerial topics, which are: The Rio Paute Water Found (FONAPA) the Cutin Project and the Collay Community, all of them working on watershed and natural resources management in different sectors of the Corridor.

I conducted survey methods training with local counterparts designated from the three aforementioned organization, plus the Ministry of Environment and the Ministry of Health Research Institute (INSPI) to conduct one-to-one interviews in the six prioritized localities.

Among June and July, I conducted interviews in the field and facilitated participatory mapping in four villages in the localities of Gualaceo, Mariano Moreno, Sigsig and Limón-Indanza, and piloted interviews in Mariano-Moreno and Gualaceo (highlands) and La Florida (Morona-Santiago, lowlands).

The trained personnel and the partnering stakeholders will be conducting interviews in the field from August and until November 2019, under the coordination of NCI, to complete the field data gathering.

This will be a first step for seeking agreements into managerial solutions for the potential issues identified among people and wildlife, to be included in future conservation and land use plans, which would result in beneficial outcomes for both wildlife and human welfare.

A final report for NCI, UF, and TCD compiling the final results will be prepared.

Future recommendations for Tinker

For the future of tropical conservation and development research, I suggest to strongly encourage interdisciplinary research as the one presented here, for the integration of social, ecological, financial and political sciences is urgently needed in Latin America, in order to properly address current challenges in biodiversity conservation and well-being improvement.

I also recommend continuing in the research of development alternatives revolving around natural resources sustainable management, poverty alleviation, and biodiversity assessment in tropical forests.

The Tinker Fund, even when greatly appreciated is still insufficient to cover researcher expenses as international travel and maintenance. Whenever it is possible, I would suggest expanding the financial coverage given for this purpose.

