

Building local capacity to monitor and conserve oaks in woodlands managed for charcoal

Project Report

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Project Objectives:

Our objective was to build local capacity to generate the kind of information that forest owners need to make informed decisions about how to enhance oak conservation on their land. Since April 2021 when we had our first virtual meeting of project coordinators, we have been implementing the planned activities in Santa Rosa de Lima Highlands, located in the State of Guanajuato, Mexico. The land in which the oak and biodiversity monitoring has been taking place belongs to Industrial Santa Fe, a family business and civil society that has been producing charcoal in the area for more than 50 years.

Project Outcomes: (using the method of evaluation described in the application)

Our scientists-practitioner collaboration generated a co-designed monitoring program that is grounded on scientific understanding of oaks phenology and local knowledge about the territory and its oak species. We have build capacity and skills in a set of local parataxonomists who – for more than a year – have been undertaking all the monitoring activities in the project area trained to generate a wide range of reliable information on oaks and the woodland systems.

We started with a total of eight (8) participants who were trained in July 2021 to identify the different oaks in the project area. Eleven local participants had indicated interest in participating. However, it was eight that were available for the first training. During this first training, we set up 3 monitoring sites which were served both to train participants and to practice the monitoring process and refine the field forms. This was our first measure of interest in the topic and possibly of conservation);

Of the eight trained, four participated in subsequent trainings and monitoring and of these, three have been the consistent monitoring team for the project. After the first training, we discovered that half of the trainees were temporary migrants to the USA who were regularly

absent from the project area six months of the year. Their continued participation in the monitoring program was deemed disruptive. Moreover, their expectations for remuneration were much too high for the project to maintain. In this regards, the Project's compensation to monitoring is not considered incentive enough for some. The monitoring team of four was reduced to three (3) in April 2022 after one of the participants confessed that it was competing with other activities that paid better.

With the exception of the complaint about the low compensation amounts that some participants have voiced, evaluation of the first and subsequent trainings have been favourable. Participants expressed great interest in learning more about oaks and the multiple ways that they can be used. They were curious to explore what could be done with acorns and to explore some economic opportunities from oaks beyond charcoal and firewood. Towards the end of 2021, at the request of the monitoring team, we added eight camera traps into the monitoring program to obtain some wildlife sightings. Visiting the cameras to check on them, download data and ensure that they were still there has served as a strong motivator keeping the monitoring team active over the last year.

For the core monitoring team, there was frustration with a monitoring application that we were developing for the Project that was not working in the field due to network availability. This required us to abandon the idea of collecting data digitally. All data has been transcribed from notebooks to excel however and is now available for some preliminary analysis.

The core monitoring team kept monitoring and expanding the monitoring sites throughout 2022. A total of 13 sites have been established in the area, and some sites have been monitored up to 4 times since they were established. Consistency of data generation is medium since the area is very large and – to avoid the expense of time and gas - the monitoring trips must be incorporated into other activities going on in any given area. Despite initiating a Whatsapp group between the coordinators and monitoring team, this has rarely been used by the monitoring team. Attempts to obtain written reports on project activities have generated only one report so far (from February 2022). This has been viewed as an additional burden and needs to be reevaluation. We are in the process of compiling the data from the 13 sites to start undertaking some analyses that can provide us with insights into Oak distribution and phenology in the Project area.

Our objective of generating interest in nearby communities and raising awareness about oaks, this is ongoing. An undergraduate student started working with traditional knowledge holders about the use of oaks and also – in parallel – conducted a literature review of the way oaks have historically been used in Mexico and elsewhere. Unfortunately, the student was not able to

pursue the work she started. Nonetheless, her presentation to the first group of trainees generated a lot of interest and excitement about potentially pursuing some of the uses and testing them locally. The core monitoring team, on the other hand, has been developing a local manual for oak identification that we would like to complete and disseminate locally, together with a summary of the undergraduate's work.

We have discussed several opportunities for developing a grant to fund subsequent monitoring work, start an oak nursery for restoration projects in the area, and for exploring some of the alternative uses of oaks that participants identified as "promising". More specifically, there was interest in exploring the potential of producing tar during the charcoal process and of making flour (and subsequently pastry) out of acorns. Funding for these specific activities has not been explored further.

The most perceptible changes to woodland management based on what has been thus far learned from the monitoring activities is an overall appreciation of the diversity of oaks that there are and a realization that they each have a very distinct distribution and phenology. There is great interest to identify the species that are most appropriate for restoration activities that need to occur in the project area and to propagate them locally. The camera traps confirmed the presence of deer and puma in the area, that – for the owners of the territory – highlighted the importance of maintaining forested land instead of converting it to agriculture.

We have yet to undertake an end-of-project evaluation to assess the overall satisfaction with the project of project participants. We intend to do this as part of the project extension period that we are requesting.

Photos and videos:

Photos and videos and other products developed during the project are being compiled.

Expenditures

On the 18th of March 2021, a total of Mexican pesos 95,326.77 was deposited into the Principal Coordinator's account. To date, there are MXP64,000 in the account. The lower-than-expected expenditure is due to a number of factors:

- The monitoring team is smaller than originally anticipated and has been monitoring less frequently than expected (we had predicted a team of 5, but only 2 were taking a payment).
- Cost of gas and meals during monitoring were absorbed by the Association as part of their contribution to the project expenses.

- Some of the costs of visiting the site by the two coordinators were absorbed by the coordinators, also as a contribution to the project.
- We undertook much fewer activities in the field due to the absence of the Project Lead in Mexico for most of 2022 (she was on Sabbatical).

Request for an extension

The coordinators and monitoring team would like to have an extension to the end of August 2023 in order to wrap up some of the project activities that were not completed due to the absence of fluid communication in 2022. We would like to use the funds that are left to undertake the following activities:

- Complete the local oaks manual and distribute it locally as a PDF, an infographic and a printed version from the oak monitoring and literature analysis that was conducted by the undergraduate student.
- Complete the data analysis and to use the results to propel discussions with the National Forestry Commission about how to ensure that the forest management plans are sensitive to the diversity and distribution of oaks in the area and do not over-harvest in areas where conditions for resprouting and growth are difficult.
- Train the monitoring team to propagate the oaks found in the project area so that they can be used (instead of pines) to restore degraded areas. This would require building a small home-size nursery.
- Undertake talks in the area with nearby communities to share what has been learned.
- Assess the value of the monitoring and – if clear values can be identified – explore how monitoring activities can be looped into Company activities and deliverables.