

## Project Update: August 2018

The aim of this first quarter report is to communicate the progress on activities from the period June, July and August 2018. During these months progress on fieldwork has been achieved regarding: a) bimestrial sampling measurement from 14 established plots; b) assessment of forest canopy and light; c) assessment of regeneration and diversity; and d) vegetation classification (landscape composition verification). More advances have been made on interviews design, and the process of authorization to enter to communitarian forests and those from ejidos land, has been started.

### a) Bimestrial sampling measurement

During August 2018, 1456 samplings were established on 14 plots, located throughout the altitudinal gradient. The interest variables for this task are height, diameter, survival and herbivory. Fieldwork material acquired to achieve this target was: An electronic digital vernier caliper and tape measure.

### b) Assessment of forest canopy and light regime

The first hemispherical pictures were collected with a smartphone "Moto G5 Plus" device. This procedure has been carried out to evaluate the canopy and light regime within the 14 established plots. Photographs were taken to estimate the absorbed photosynthetic radiation and leaf area index.

### c) Assessment of regeneration, diversity and population interviews

Permissions were requested to access ejidos where oaks fragments are present to assess regeneration and diversity. An interpreter helped on asking for permission to communitarian leaders, as well as those inhabits of ejidos land. It is important to mention that, interviews will be set within this area to found social variables influencing diversity, coverage and regeneration of oaks. If the authorisation is not granted, this methodology will be modified.

The interview design is still on a draft, it will be first tested at the next fieldwork period, starting in September.

### d) Vegetation classification:

Identification fieldwork has been made within the Valle de Jovel basin, to verify the presence of oaks areas that were classified by remote sensing.

In conclusion, fieldwork during these last months has been favourable to continue with this research project, although there is still a lot of work to be done, which depends on the cooperation of local inhabitants.

Photographs (All the photographs have been taken by me)

1. Woodland management using the traditional method, "Coppicing", from which timber and fuelwood are obtained. This oak management is representative of the Tzontehuitz- San Juan Chamula, which is the highest point of the basin.

2. Stacks of branches in one of the experimental plots, due to slash farming, where vegetation is cut down, as a method of land clearing for cultivation.
3. Measurement of samplings within the plot of The Arcotete Ecotourism Park.
4. Fragment of *Quercus* spp for one regeneration and diversity transect at the Tzontehuitz.
5. A private plot from the samples, presents more occurrence of oak trees and a healthy soil (understorey) rather than the rest of the plots, having different land tenure.



Left: My team sapling measuring. Right: Woodland management.



Left: Oak sapling. Right: Slash farming.



Fragment transect.