Project Update: August 2014

We have selected seven cloud forest (CF) sites (out of the required nine) to establish the plantation enrichment plots. Three sites are in the altitudinal range for upper montane CF (2100 - 2550 m asl), one site corresponds to intermediate montane CF (1700 – 20150 m asl) and three sites correspond to lower montane CF (1250 – 1650 m asl). In the coming weeks, we will undertake a series of trips to find two more sites for the intermediate montane CF range. We have completed the collection of data for structure and tree composition at Site 1 and we plan to complete the data collection for the other eight sites during October and November 2014.

In the nurseries at INECOL A.C. and in the community of El Zapotal, we have carried out an inventory of the number of seedlings available for transplanting (see table 1). We also have 540 seedlings of *Platanus mexicana* Moric. (Near Threatened). This species is found only on riversides, which is a restricted habitat in Mexico. We would probably plant this species in different areas because the selected sites are inappropriate for this species and also because it has been reported that it can have allelopathic effects on the regeneration of other species. We have recently sown seeds of *Melisoma alba* (Schltdl.) Walp in the nursery, and are following fruiting individuals of *Podocarpus matudae* Lundell, and *Fagus grandifolia* Ehrh. var mexicana (Martínez) Little. We plan to collect fruits of *P. matudae* and *F. grandifolia* in the next months. These three species are classified as endangered and are restricted to CF. Due to the common occurrence of freezing temperatures over the winter (November to February), transplanting to the enrichment plantation sites has been planned for March 2015. We plan to transplant an assemblage of nine tree species at all sites, excluding *Sideroxylon contrerasii*. Due to the reduced number of seedlings produced for this species they will be transplanted only to the upper montane CF sites.

Table 1. Number of seedlings available for transplantation of tree species for the restoration of degraded tropical montane cloud forest in Veracruz, Mexico. Conservation status according to González-Espinosa et al. (2011): E = Endangered, V= vulnerable, NT = near threatened and LC = least concern.

Species	**Family**	**Status[1]**	**Germination (%)**	**No. seedlings for transplanting**
Fraxinus uhdei (Wenz.) Lingelsh.	Oleaceae	LC	35.5	1994
Juglans pyriformis Liebm.	Juglandaceae	EN	53.6	510
Magnolia dealbata Zucc.	Magnoliaceae	EN	90.8	1870
Ocotea disjunta Lorea-Hern.	Lauraceae	EN	65.7	296
Oreomunea mexicana J.F. Leroy	Juglandaceae	EN	12.7[a]	500
Osmanthus americana (L.) Benth. & Hook.f. ex A.Gray	Oleaceae	NT	0.7[a]	0[b]

Prunus rhamnoides Koehne	Rosaceae	VU		560
Quercus germana Schltdl. & Cham.	Fagaceae	CR	21.5	139
Sideroxylon contrerasii (Lundell) T.D.Penn.	Sapotaceae	VU	16.8 [c]	94
Ulmus mexicana (Liebm.) Planch.	Ulmaceae	EN	33.6	268
Zanthoxylum melanostictum Schltdl. & Cham.	Rutaceae	LC	11.4	0[d]

1. M. González-Espinosa, J. A. Meave, F.G. Lorea-Hernández, G. Ibarra-Manríquez and A. C. Newton (Eds.). 2011. The Red List of Mexican Cloud Forest Trees. Fauna & Flora International. UK. [a] We identified a problem with the substrate that probably caused the reduced germination. [b] Seeds are germinating but will be too small for transplanting in the next six months. [c] Germination continues. [d] Seedling had very low survival.

We are also currently working on the field guides for identification and propagation of 12 CF tree species. We have included the progress to date for two of the species as attachments.

Left: Field transect site 1. Right Forest inventory site 1.