Expedition to Yarimita

Participants: Peter M. Jørgensen (Project PI), Alejandro Araujo M., Leslie Cayola P. (botanists), Daniel Choque, Jorge Uzquiano (thesis students in the project), Angel Fernández, Edwin Ticona, Ericka Llanos (volunteers), Ramiro Cuevas (logistic leader of the expedition), Ever Cuevas, Noel Cuevas, Cosme Cuevas, Guzmán Jove (guides), Pilar Laura de Cuevas (cook). Duration 25 days: March 1–25, 2005.

Main Results: 16 non permanent transect plots (0.1 ha each plot) and 3 permanent plots (1 ha) were established. We measured a total 7276 trees or lianas and made a total of 478 collections (Table 1 & 2). The plots were distributed in three different elevation classes.

Stuck on the “road” between Apolo and Pata, spending 17 hours here. (P.M. Jørgensen).

Table 1: Plot studies carried out in the area of Yarimita

Inventory	Area (ha)	Coordinates	Elevation (m)	# Individuals inventoried
Transect 1	0.1	14º33’13.3’’S 68º41’17.6’’W	1045	482
Transect 2	0.1	14º33’17.7’’S 68º41’9.3’’W	1036	180
Transect 3	0.1	14º33’29.6’’S 68º40’53.1’’W	1020	278
Transect 4	0.1	14º33’36.1’’S 68º42’57.6’W	1094	225
Transect 5	0.1	14º31’58.7’’S 68º41’37.1’’W	916	259
Transect 6	0.1	14º32’27.1’’S 68º41’38.8’’W	916	353
Transect 7	0.1	14º32’50.5’’S 68º41’33.5’’W	915	269
Transect 8	0.1	14º33’1’’S 68º41’24.2’’W	946	292
Transect 9	0.1	14º32’45.2’’S 68º41’40.2’’W	892	264
Transect 10	0.1	14º33’37.1’’S 68º41’9.3’’W	996	262
Transect 11	0.1	14º33’10’’S 68º41’12.7’’W	1072	702
Transect 12	0.1	14º32’58.3’’S 68º40’59.1’’W	1316	322
Transect 13	0.1	14º32’56.2’’S 68º41’3.4’’W	1217	417
Transect 14	0.1	14º32’50.1’’S 68º41’10.5’’W	1175	436
Transect 15	0.1	14º32’55’’S 68º41’24.9’’W	979	533
Transect 16	0.1	14º32’21.8’’S 68º41’22.5’’W	992	418
Permanent 1	1	14º33’13.3’’S 68º41’17.6’’W	940	428
Permanent 2	1	14º33’17.7’’S 68º41’9.3’’W	1030	614
Permanent 3	1	14º33’29.6’’S 68º40’53.1’’W	1170	542

Table 2: Collections made per participants.

Participants	# Collections made
Alejandro Araujo M.	75
Leslie Cayola P.	100
Daniel Choque	228
Jorge Uzquiano	150

Notes from the expedition:

We left March 1, 2005 for Yarimita with a planned return date of March 22, we returned March 25 after a very successful trip.

It was supposedly the end of the rainy season, but the rains had not completely let up. The roads were getting more and more difficult to pass the closer we got to our destination. One of the trucks got stuck in a mud hole for 17 hours (Photo 1). We slept about five hours sitting in the truck, we were simply out of strength and there were nowhere to pitch our tents. The next morning we finally made it out of the mud and arrived without too many additional problems at our parting point at about 1900 m elevation near the Pata community in the afternoon on March 3. The last part of the road trip, only 40 km, took 28 hours. The following day, and well rested, we started walking down the trail to Yarimita, with our train of 11 mules and horses. We passed though grasslands and

Panoramic view of trail Pata–Yarimita, you see savannas and tiny Cerrado forests, Montane forests on the higher areas and riverine forests dominated by Hura crepitans and Gynerium sagittatum. In the bottom the Tuichi river. (P.M. Jørgensen).

“cerrados” before we dove into the dry forests along Río Tuichi (Photo 2). It was a pleasant stroll of 5–7 hours covering an estimated distance of 15 km, and an elevation difference of 1000 m.

March 5, we divide ourselves into three groups, one to establish camp and the other two to scout the area for appropriate sites for the many plots we were going to set up.

After establishing the areas for the plots we commenced work. The non permanent plots normally take one day to execute where as the 1 ha plots takes close to a week to establish and inventory. We kept a good working rhythm and were not interrupted by rain except for one night where a heavy thunderstorm hit the camp.

3. View of the dry forest at Yarimita, from the shores of the Tuichi river. 4. *Oxandra espintana.* 5. One of several Cactaceae found as trees in the forest. 6. Legume liana. 7. *Senna spectabilis* a large tree found in the back yards in the villages of the area, but also occuring in the forests. (L. Cayola). 8. *Urera baccifera*. (P.M. Jørgensen). 9. *Anthurium* sp., was common. (L. Cayola).

The forest at Yarimita that we inventoried was located on the northwest facing slopes of the Tuichi valley, the terrain was very steep. The forest was semideciduous, not all species drops their leaves during the dry season, however, most of the understory dries out and almost disappears completely. The forest was dominated by Legumes, and although it was green and lush while we were there, a clear indication that it is a dry forest under severe water stress part of the year is the frequent encounter with species of the Cactus family (Photo 3).

We have in a couple of prior expeditions found *Oxandra espinata*, but it was always sterile, however, this time we found both flowering and fruiting material (photo 4), the same could be said for many other species typical of these dry forest (photo 5, a cactus that we previously haven't collected).

Other groups that we found to be fertile during the expedition were species of Fabaceas, Urticaceas and Araceas (Photos 6, 7, 8 & 9).

When it comes to fauna, we can report that this forest is in almost pristine condition. We saw and heard monkeys with frequency; we made a total of eight observation of Cracidae (pavo de monte, mitu, or wild turkey) which often are the first species to become rare or not seen at all in disturbed forest communities. Our photographs however, only documents a few insects and birds (photo 10, 11 & 12).

10. Well camouflaged Mantis. 11. Egg of "pava de monte," 12. Elephant headed moth, according to our guides the species is always found in pairs. (L. Cayola).