# Study sites

# According to information that we got from Jose DeCoux and some Los Cedros farmlands owners as Don Homero Sánchez mentioned the fact that several forest areas were cleared specially among 1978 and 1992. In some sites as around the Observatory trail the forest was cut to show to the authorities’ land possession, there for some areas as soon the forest was cut those areas were abandoned. In other sites as around the trail to Magdalena the land was cultivated and after some years they were also abandoned and some of them had with grass for cattle until 2004. For the cattle production there were two type of grasses, Pasto Miel and the less abundant Gramalote grass. The regenerating plots in different study areas were stablished depending on regeneration areas availability.

There were selected Four primary forest study areas and inside each area were studied three habitat types gaps, natural secondary forest and close canopy, the study was done using circular plots.

Each plot had 30m in diameter and the size of the plots on the abandoned farmland was like the mature forest. The regeneration was study depending the regeneration areas availability. Within each circular plot an area 5m by 5m and a plot of 10x10m were used to sample the small trees from around 50cm and more.

Within each study site four to six circular plots were done for the secondary regeneration on deforested and abandoned forest and for agriculture or pasture were not available in all sites for this reason it was not possible to find the same number of samples of abandon field in all the study areas. .

1. Number of trees < 15cm
2. Altitude of plot
3. Diameter
4. Height of individuals trees
5. Characteristics of trees (damaged, broken, forked)
6. Height of first branch
7. Fallen and standing deadwood