Project Updates: March 2014

Initially we studied the landscape with ArcGIS 10 to select sites with different degree of forest remnants and agro-systems. Once in the field, we determined areas where there are more chances to locate medium and large sized mammals, we usually could find creeks, rivers and trails within the remnants. Unfortunately some cameras have been stolen during the study, right now we have 43 throughout La Virgen and Chilamate in Sarapiquí, which is in the northern area of Costa Rica. Every field visit we move 30 of these cameras to increase the probability of detection, although visits from 2013 were a little complicated due to the rain. Many cameras are in landscapes dominated by pineapple plantations (picture 1) and grasslands (picture 2), however we have some cameras on remnants near reforestation areas as well as continuous forest.

So far we have had excellent success in the detection of mammals; we count with both pictures and videos of more than 21 species of medium and large sized mammals, such as *Tapirus bairdii* (Picture 3), *Leopardus pardalis* (picture 4) and *Eira barbara* (picture 5); as well as smaller mammals such as rodents. We also have been on the lookout for tracks, and again the tapirs are quite abundant, which is interesting because it had not been seen in the area in several years before 2013. *Puma concolor* has been detected by residents and camera traps that belong to Tirimbina Reserve, however we have not detected it yet.

We have two more field visits before we can gather all the information and determine the occupation rate of these species in landscapes with different matrix.



