

Project Update: February 2019

We continue with the measurements of soil greenhouse gas emissions at three different land covers in the tropical dry forest of Santa Rosa National Park in Costa Rica. Local people and workers from the park were trained as field assistants and have been collecting the data using multiple manual chambers and automatic portable chambers.

Measurements for the wet season began in May and ended in December 2018 and will continue during the dry season which started in January 2019. So far, we have data from 9 months of measurements in the park. We have also trained five assistants in these measurement campaigns which have collected samples in pastures, young forests and old forests.



Figure 1. On the top a picture of the pasture in the dry season and on the bottom the pasture in the rainy season.

Collections of soil samples for analysis of microbial biomass, ammonium and nitrate have also continued during the rainy season. Samples are being analysed at the University of Costa Rica.

We are currently working on a presentation to show the main results at an international conference in a special session for "Biogeochemical cycles in Changing Tropical Systems". We are also planning a presentation at the park with all the project collaborators and personnel at the park to share our main results, knowledge, and experiences from this project.



Figure 2. On the top a picture of the forest in the dry season and on the bottom the same forest in the rainy season.



Figure 3. Assistants of the project collecting gas samples and data from soil sensors.