Getting our hands dirty in Khe Nuoc Trong Forest
Blog Suzanne Stas

PhD student Suzanne Stas brings us the latest update from Vietnam, where she is researching the impacts of forest degradation on carbon storage in Khe Nuoc Trong forest in Vietnam in a partnership between World Land Trust (WLT) and University of Leeds.

Last year we set up 24 sampling plots across the Khe Nuoc Trong forest and measured all the living and dead trees inside the plots. Back in Leeds, we calculated how much biomass and carbon is stored in these trees and plots. We found that the carbon stocks varied considerably from site to site, so to better understand what possibly drives the variation in carbon stocks, I went back to Vietnam last summer to collect soil samples from our sites.

We performed the fieldwork just before the start of the rainy and typhoon season and were very lucky that the weather gods were with us. With our team of four geared up with shovels and soil collection bags, we revisited our plots from last year and collected soil samples from each site. Most of our time was spent to travel and walk to these sites, as our locations are located all across the 50,000 acres (20,000 hectares) of Khe Nuoc Trong.

Even though we were there for soil samples, we had our fair share of wild critter encounters. During our first day in the forest, we encountered the biggest spider we had ever seen. The next trip, we stumbled upon a huge stick insect and beetle almost as big as my hand, both pictured below. The team also foraged for small critters from the river, bringing back frogs, crabs and snails to be prepared by our cook.

Back in the office, we air-dried our samples in trays covered by mosquito nets to keep out dust and insects. We transported the samples to a soil lab in Hue, a 4-hour drive from Dong Hoi, where the soil samples were analysed for texture, pH, carbon content and various nutrients. After crushing and sieving the soil, we analysed the pH and oven-dried some of our samples to derive dry weights. Currently, the lab is performing the remaining analyses on our soil samples and the team is finishing the soil collection in the last plots.

Our soil sampling team and cook. Photo: Suzanne Stas

Collecting soil samples in a fixed volume ring. Photo: Suzanne Stas

Taking soil samples is a real work-out in the Khe Nuoc Trong forest, especially on sites with many stones inside the ground. Photo: Suzanne Stas

Storing the soil samples in numbered collection bags. Photo: Suzanne Stas

The big spider. Photo: Suzanne Stas

The huge stick insect. Photo: Le Cong Tinh

The enormous beetle. Photo: Suzanne Stas

Our “soil drying-lab” at the office. Photo: Suzanne Stas

Preparing the soil samples for oven-drying in the lab. Photo: Suzanne Stas