More Carbon Underground

Soils play a central role in the global carbon cycle because they contain four times more carbon than the biosphere and three times more carbon than the atmosphere. In tropical forests, the surface meter of soil contains about as much carbon as the forest vegetation, yet little is known about the likely response of soil carbon to changes in climate or forest dynamics. As part of the HSBC Climate Partnership, the Center for Tropical Forest Science is studying soil carbon in forests in Europe, Asia, and the Americas. The results will help scientists understand what mechanisms and processes control the amount of carbon stored in tropical forest soils and how shifts in global climate might affect their ability to store carbon.

Visit [www.ctfs.si.edu/group/Carbon/](http://www.ctfs.si.edu/group/Carbon/) and [www.ctfs.si.edu/group/Science+Initiatives/Soils](http://www.ctfs.si.edu/group/Science+Initiatives/Soils) to learn more about carbon and soil research at CTFS.

Ben Turner, a soil scientist at the Smithsonian Tropical Research Institute, digs a profile pit to study carbon in tropical rainforest soil in Panama. The deep red color is caused by iron oxide minerals and is typical of many forest soils in the humid tropics.

Soil profile at Pasoh, Malaysia.

Sampling soil at Pasoh, Malaysia.

Soil in Singapore.

Profile of soil at Huai Kha Khaeng, Thailand. Photo Christian Ziegler.

Sampling soil in Singapore.