Fields in Guatemala with Good Potential for Reforestation

This field in Northeastern Guatemala was once rainforest. It was logged for timber, but now serves as a pasture for cattle grazing.

Overgrazing reduces the usefulness, productivity, and biodiversity of the land. Eventually overgrazing becomes a cause of drying and desertification and then erosion. Overgrazing can also allow the spread of invasive species of non-native plants and of weeds.

These cattle have overgrazed this field. The result will be erosion and sedementation in the nearby streams and rivers.

Too many cattle in a pasture reduces the usefulness, productivity, and biodiversity of the land and is a cause of encroaching desertification which has historically plagued this region. This problem could be corrected simply by adding more trees to this pasture.

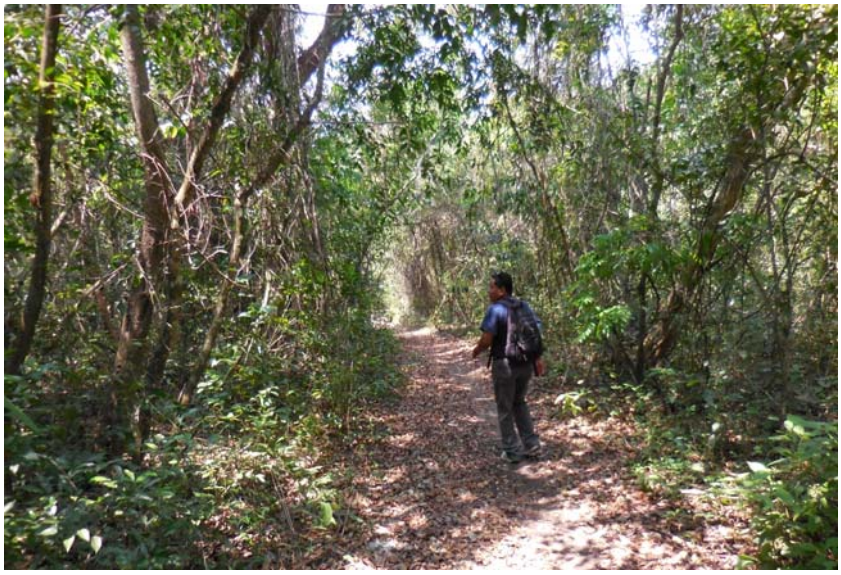
In this overgrazed field, noxious weeds are beginning to appear which the tropical cattle will not eat. Tropical forests have thin soils and become depleted after several years of grazing.

Over time the unedible weeds take over a field and make it unable to support profitable cattle grazing.

These are the type of areas which can and should be restored to rainforest.

This is former rainforest land which was cut and turned into pasture. Weeds and inedible brush have taken over this field. It is no longer useful as pasture. In the foreground you can see how herbicide has been used to kill the brush. The managers will clear the brush and try to return it to pasture. See two workers in the center (small and hard to see) who are clearing the brush by hand with machetes. They will work all day in the blazing hot sun and receive maybe $2 for a full day of labor. The brush will soon return, maybe in two years. This land should be restored to rainforest.

This is second growth forest which was logged in the 1980s and became pasture. This was replanted around 2006 and is returning to rainforest. Jose Luis Morales, center, manages our reforestation operation from the town of Flores in the Peten district of NE Guatemala. In another ten years this will become restored tropical rainforest. One test for a restored rainforest is when monkeys return. Birds and monkeys are important for scattering fruit seeds and accelerating a return of a full spectrum of forest botanicals.



The soil in this pasture has become dried out and depleted of essential nutrients. Cattle have overgrazed this once productive pasture. It has now lost most of its productivity. Notice the few remaining cattle. They are skinny and undernourished. The good thing, if you look closely, in the background some rainforest remains. While this land should never have been cut, its proximity to remaining rainforest makes it a good candidate for full restoration.

Here is an official forest reserve that our work has produced. The trees in this reserve are preserved in perpetuity. However food gathering is allowed as is controlled hunting, thatch gathering for housing, and the acquisition of medicinal plants.

Our goal is a network of public forest reserves throughout this region.

The areas in which we plant are often quite beautiful. As forests are restored, this land provides a variety of benefits for local residents. This includes foods, thatch of housing, and tropical medicines.

Once reforested, this will become a rich area for the sequestration of carbon dioxide as well as a potential area for tourists to visit. Tourism can be a major source of income for this region.

Notice the bare hills on the horizon. This indicates how much rainforest land has been cut.

The World Bank considers this region one of the world's prime areas for tropical reforestation.

So far our small operation is the only agency doing work to restore forests in this part of Guatemala.

The need is truly great, but the laborers doing reforestation are few. This photo begins to show how much area is able to be reforested