

# Gerard Hertel: Saving Forests from the Ground Up

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By Marsha Johnston



From the time he was in high school, all Gerry Hertel ever wanted to do with his life was to be a forester. “I really had no idea what that meant,” he says, with a laugh, “except some idyllic idea of riding through the woods looking at stuff and someone pays you to do that. And I didn’t particularly like science!”

As it turned out, his idyllic idea became reality. Hertel’s painstaking legwork surveying overall forest health in eastern Africa has been the element critical to proving to local communities how protecting their forest, in turn, sustains their lives.

In 2000, working with support from USAID, then-Assistant Director, USDA Forest Service Hertel, began a Forest Health Monitoring project by surveying plots, in Amani Nature Reserve and near Morogoro, Tanzania and Ngangao and Chawia forests, Kenya, on foot rather than via aerial photographs. “When the farmer extends his field into the forest you can see it from the air, but you can’t see if they are cutting trees *out* of the forest,” he says. “Not many projects look at what’s going on *inside* the forest, whether human impact is happening that you can’t measure from the air.”

John Watkin, grant director for the Critical Ecosystem Partnership Fund (CEPF), says ground surveys were the natural choice for Gerry, “who really represents an Old World approach.” Hertel agrees: “People who started working in plant ecology 100 years ago would go out and observe and come up with wonderful conclusions. They just had a feel for [how] things fit together. Scientists today seem to need sophisticated computer models. I’m in between.”

On those surveys, Hertel’s team worked in areas with few human caused disturbances. Other places, Chawia Forest for example were not so well off. “Walking through the forest back then, there were lots of signs of people cutting trees,” Hertel recalls.

At that time, Hertel acknowledges, local communities had few choices. “Early on,” Hertel recounts, “the head of one of [the local environmental] councils told me, ‘We understand we are damaging our environment, but we have no alternative.’ People who live around the forest and depend on it have to have some small way of deriving an income so that the things they would get from the forest they can get somewhere else.”

In 2004, CEPF provided a grant to the Chawia community to start a tree nursery and set up alternative livelihood projects in butterfly farming, honey and silk production and pine resin harvesting. A couple of years later, the second phase of Hertel’s Forest Monitoring Project, funded by CEPF, clearly showed CEPF’s efforts to have positively benefited both the forest and the local community.

“The original forest measurements from 2000 showed that community conservation activities had had a qualitative impact on the forest. Gerry’s data showed that this forest had been entirely restored, enabling us to relocate the Taita thrush into that forest,” says CEPF’s Watkin. Adds Hertel, “*Where* things had improved in the forest, there were community livelihood projects, and the tree nursery. In 2001, for example, where we had found grazing animals in the forest, five years later, there were no animals.”

Perhaps more importantly for the forest’s future, its restored health had clearly improved the lives of the local people -- providing them more water, for example. Says Hertel, “If the forest stays intact, it will provide the maximum benefit of water over time. Otherwise, as layers get removed, it has less and less capacity to store water.”

Furthermore, says Watkin, the link between the health of the forest and improved community livelihood activities has been established firmly. “Butterfly farming has to get food plants from the forest, and honey production is more productive in the forest than on the periphery,” Watkin explains.

“Now the people in Chawia are in a position of being the wise managers of the forest. I’m confident it can sustain itself, because the people get it,” says Hertel. Now, the man whose boyhood love for the forests of northeastern Pennsylvania long ago overcame his teenage dislike for science, can hardly wait to return to his East African plots in 2011 to see what has happened in 10 years. Hertel is now Stewardship Manager for the Gordon Natural Area at West Chester University of PA.