

Did Mayas Overtax Nature?

earth

CINCINNATI—

A U.S. biologist has found a new clue to one of the great mysteries of science: What happened to the Mayan civilization?

The Mayan civilization was a group of city-states situated in what are now southern Mexico, Belize, El Salvador, Guatemala, and Honduras. The Mayas had their own customs, religion, languages, and systems of math and astronomy. Their most lasting achievements, though, were their magnificent step pyramids, some of which still stand.

The great Mayan society collapsed between the years A.D. 800 and 900. The Mayas' numbers declined, and they ceased building temples and palaces. They abandoned many of their cities. What led to that decline is a long-standing puzzle. Some scholars think disease or a prolonged drought may have been the reason. Others have found evidence that the Mayas overexploited their natural resources—the region's soil, forests, and wildlife. Still others suspect that the cause was a foreign invasion or a peasant revolt.



At its peak from A.D. 300 to 900, the Mayan civilization extended across this region of Central America (colored in orange).

The newest clue was uncovered by a team of researchers led by David Lentz, a *botanist* (plant scientist) at the University of Cincinnati. He sampled wooden

beams at six temples and two palaces in the ancient Mayan city of Tikal in Guatemala. Three of the temples, all built before 741, were made from the strong, easily carved timber of the sapodilla tree. The other structures, built after 741, were made from logwood, an inferior type of timber that is gnarly and impossible to carve.

Lentz says the switch from sapodilla to logwood is another sign that the Mayas exhausted their resources. They overtaxed nature to the point where it could no longer support them, he says. ■

A pyramid in the ancient Mayan city of Tikal in Guatemala



Copyright of Current Science is the property of Weekly Reader Corporation and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.