

Ancient Amazon Cities Found; A Vast Urban Network

John Roach, for National Geographic News, August 28, 2008

Dozens of ancient, densely packed, towns, villages, and hamlets arranged in an organized pattern have been mapped in the Brazilian Amazon, anthropologists announced today.

The finding suggests that vast swathes of "pristine" rain forest may actually have been sophisticated urban landscapes prior to the arrival of European colonists.

"It is very different from what we might expect using certain classic models of urbanism," noted study co-author Michael Heckenberger, anthropologist at University of Florida Gainesville.

Nevertheless, he said, repeated patterns within and among settlements across the landscape suggest a highly ordered and planned society on par with any medieval European town.

The finding supports a controversial theory that the Amazon River Basin teemed with large societies that were all but obliterated by disease when European colonists arrived in the 15th and 16th centuries.

The isolated tribes that remain in the Amazon today are the last survivors of these once great societies, according to the theory.

If this theory is correct, the networked structure of the ancient settlements may lend insight to better protect and manage the indigenous populations and forests that remain in the Amazon today, scientists said.

Heckenberger and his colleagues from the U.S. and Brazil—including a member of the Kuikuro, an indigenous Amazonian tribe—report their finding today in the journal *Science*.

Urban Plan

In 1993, Heckenberger lived with the Kuikuro near the headwaters of the Xingu River. Within two weeks of his stay, he learned about the ancient settlements and began a 15-year effort to study and map them in detail.

So far he has identified at least two major clusters—or polities—of towns, villages and hamlets. Each cluster contains a central seat of ritualistic power with wide roads radiating out to other communities.

A major road aligned with the summer solstice intersects each central plaza. Larger towns, placed at cardinal points from the central power seat, were walled much like a medieval town, noted Heckenberger. Smaller villages and hamlets were less well defined.

Between the settlements, which today are almost completely overgrown, was a patchwork of agricultural fields for crops such as manioc along with dams and ponds likely used for fish farms.

"The whole landscape is almost like a latticework, the way it is gridded off," Heckenberger said. "The individual centers themselves are much less constructed. It is more patterned at the regional level."

At their height between A.D. 1250 and 1650, the clusters may have housed around 50,000 people, the scientists noted.

According to Heckenberger, the planned structure of these settlements is indicative of the regional planning and political organization that are hallmarks of urban society.

"These are far more planned at the regional level than your average medieval town," he said, noting that rural landscapes in medieval settlements were randomly oriented.

"Here things are oriented at the same angles and distances across the entire landscape."

"Garden Cities"

The research "raises huge and important questions," Susan Hecht, an Amazon specialist at the University of California, Los Angeles, was quoted saying in a related *Science* news piece

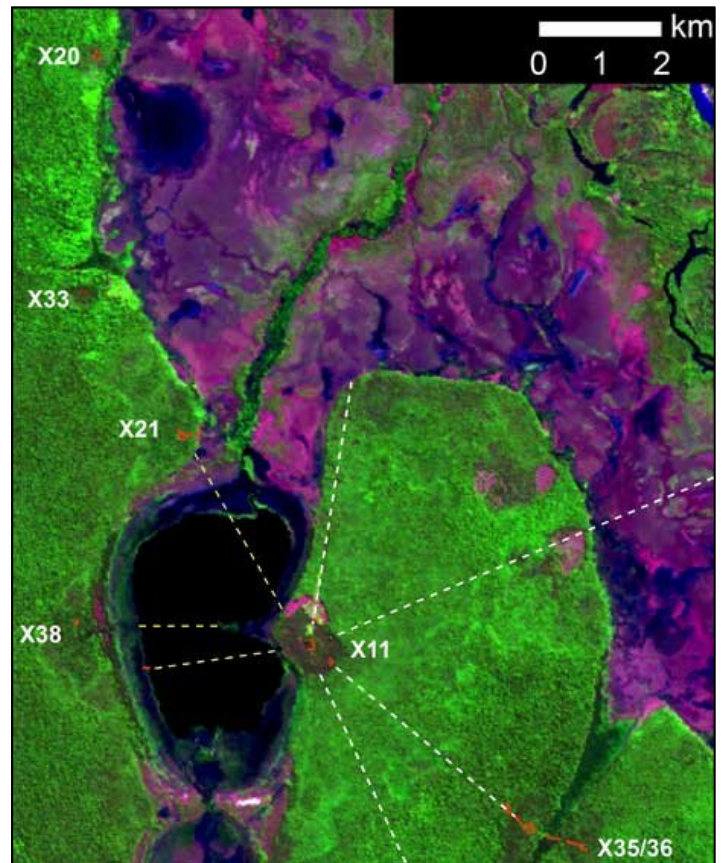


Fig. 1: Lines mapped from village earthworks radiate outward from the central power seat in the southernmost of two recently identified clusters of ancient Amazon towns. Dozens of densely packed, pre-Columbian towns, villages, and hamlets arranged in an organized pattern have been mapped in the Brazilian Amazon, anthropologists announced in late August 2008. Map courtesy Science/AAAS

written by Charles Mann.

Mann is the author of the 2005 book *1491: New Revelations of the Americas Before Columbus*, which describes theories of urban planning in the Amazon.

For one, Hecht was quoted as saying, the research adds further weight to the idea that the Amazon Basin once supported large and complex societies.

Other scientists, notably archaeologist Betty Meggers at the Smithsonian Institution in Washington, D.C., have argued that Amazonian soils were too poor to support large human populations for extended periods.

Hecht said the research also challenges the idea that urbanism means a central, dominant, and powerful city. Smaller, but highly connected settlements may also have been common.

According to study co-author Heckenberger, the clusters of towns in the pre-Columbian Amazon were similar to the system envisioned by British planner Ebenezer Howard in his 1902 book, *Garden Cities of Tomorrow*.

Howard argued for a system of tightly linked smaller cities instead of large megacities that are eyesores in the natural world.

"If [he] knew about Xingu, it would have been a chapter in his book," Heckenberger said.

And now that the Amazonian "garden cities" have been found, Heckenberger added, scientists and planners ought to study them closely for alternatives to the modern system that is destroying vast reaches of the Amazon and displacing the last of the region's indigenous tribes.

"We know we have to come up with alternatives," he said, "so here is a place we may want to look."