

# Mayan pool in the rainforest: Archaeologists find huge artificial lake with a ceramic-lined floor

August 26 2010

---

Archaeologists from the University of Bonn found a water reservoir the size of a soccer field, whose floor is lined with ceramic shards, in the Mexican rainforest. It seems that in combination with the limestone on top, the shards were supposed to seal the artificial lake. The system was built about 1,500 years ago. It is the first example of this design found for the Maya. It is not yet known whether the reservoir's entire floor is tiled.

Since 2009, researchers from Germany and Mexico have been systematically uncovering and mapping the old walls of Uxul, a Mayan city. "In the process, we also came across two, about 100 m square water reservoirs," explained Iken Paap, who directs the project with Professor Dr. Nikolai Grube and the Mexican archaeologist Antonio Benavides Castillo.

Such monster pools, which are also known from other Mayan cities, are called "aguadas." Similar to present-day water towers, they served to store drinking water. But the people of Uxul seem to have thought of a particularly smart way to seal their aguada. "We conducted a trial dig in the center of one of the water reservoirs," explains Nicolaus Seefeld, a young scholar. "We found that the bottom, which is at a depth of two meters, was covered with ceramic shards - probably from plates - practically without any gaps. But we don't know yet whether it's like this throughout the entire aguada."

If so, that would be a minor sensation - merely due to the quantity of ceramics required. The aguadas in Uxul were each as large as ten Olympic-size pools. Maybe there used to be even more artificial lakes. After all, the precious commodity had to be enough to last a population of at least 2,000 through the 3-month dry season.

The Mayan term "uxul," by the way, means "at the end" in English. Karl Ruppert and John H. Denison from the Carnegie Institution of Washington, who discovered the city, had named it that in 1934 - exhausted and sick after a long expedition through the jungles of Mexico's Yucatán peninsula. The city's original name remains unknown to this day.

If Uxul was "at the end of the world" in the 1930's, not much has changed today. "You can only get to the ruins via 120 km of jungle paths clear across the Calakmul Biosphere Reserve, far from modern roads and settlements," explains Dr. Iken Paap. These are difficult conditions for the [archaeologists](#) and the German-Mexican excavation team. This year, they spent three months in the forest to explore the Mayan city.

## **Flourishing trade center**

What is becoming more and more obvious as the excavations progress is the fact that Uxul was nowhere near "at the end" or isolated in the jungle during its heyday in the Classical period (250 to 900 A.D.): Uxul was located in a densely populated area between the big Mayan cities of El Mirador to the south and Calakmul to the northeast. It had trade connections as far as present-day southern Guatemala and the Central Mexican Plateau.

Uxul was settled for several epochs of the Mayan culture. So much was concluded by the Bonn scholars after analyzing the dig and its settlement layers. "This year, we were able to excavate a sequence of layers that was

over three meters deep, ranging probably from the late Pre- to the End- or Post-Classical periods," explains Iken Paap.

Inscriptions report that, around 630 A.D., Uxul was annexed under the rule of Calakmul, which was at a distance of about 26 kilometers. To what extent was life in the city and the surrounding area affected and influenced by such changes in power? Did Uxul have its own trade connections that continued to exist during Calakmul's rule? Did the population experience the crises of the elites directly in their own daily lives? Or were these disputes between the ruling powers, which have been given more importance due to being recorded on steles and altars than they were accorded by contemporary strata of the population?

"This Spring for the first time we found tombs that had not been destroyed by grave robbers in their search for ceramics and jade jewelry," said Professor Dr. Nikolai Grube. "We are hoping that this and new studies on the drinking water system and history of vegetation will provide us with new insights into the living situation of the population of this [Mayan city](#)."

Provided by University of Bonn

Citation: Mayan pool in the rainforest: Archaeologists find huge artificial lake with a ceramic-lined floor (2010, August 26) retrieved 3 May 2024 from <https://phys.org/news/2010-08-mayan-pool-rainforest-archaeologists-huge.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--