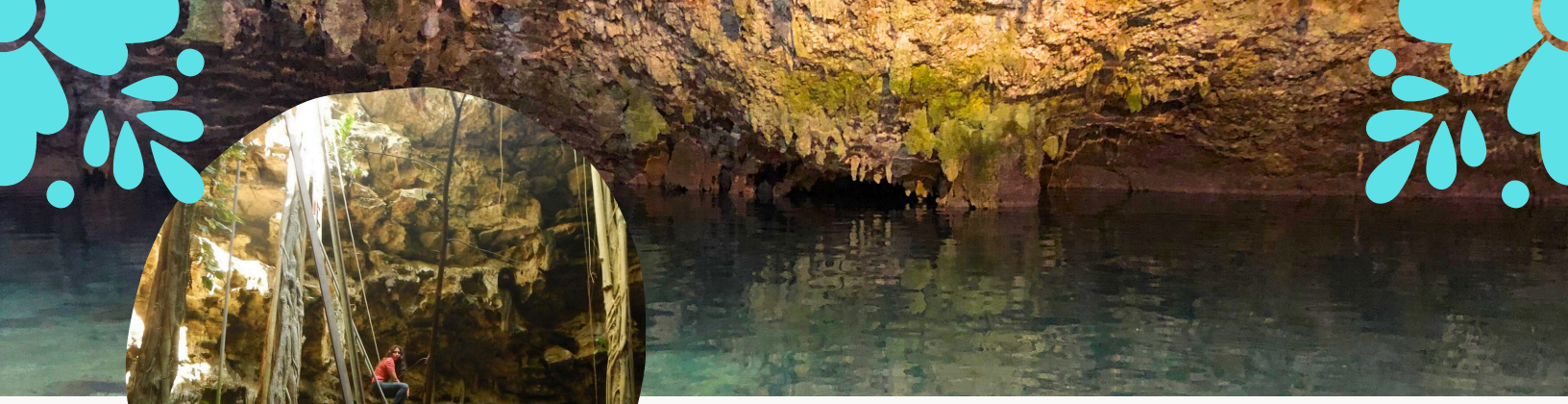

Yolanda Lopez-Moldonado

Located in the South of Mexico is the Yucatan Peninsula, separating the Atlantic Ocean from the Pacific. Thick jungles full of monkeys, parrots, and anteaters cover the region. Near the sandy coastlines, iguanas bask in the sun. Nearby, the dense jungle changes to swampy mangrove forests where alligators can be found.

The story of how the Yucatan peninsula formed begins on the seafloor. Long ago, sediments were deposited on the ocean floor and slowly solidified into limestone. Over millions of years, this buried limestone bedrock was uplifted and a vast plane of limestone rock was exposed on the surface.

Limestone is permeable, allowing water to seep through it. As water seeps into the porous rock, it dissolves the limestone forming holes, caverns, and caves. In the Yucatan, rivers don't flow above ground—instead, underground rivers stretch hundreds of miles flowing through limestone cave systems.

Rainwater that seeps through the ground deposits minerals that decorate the cave with stalactites, stalagmites, and beautiful rock curtains and pillars.

This crystal clear underground water is a precious treasure to the people of the Yucatan, like Yolanda. From the surface, you can only reach this hidden, marvelous underground world where the cave roofs collapse forming sinkholes called cenotes, pronounced "se-no-tayz". When you spot a cenote, you see an opening in the thick trees of the jungle. You see a small rocky hole with crystal clear aquamarine water. The cold water shimmers in the sunlight.

For centuries, the cenotes have been an important, sacred source of groundwater for the ancient Maya. Yolanda knows this and was always very curious about the amazing natural formations around her, and knew there were three types of cenotes: open, semi-open, and closed. She knows she and her dog, Lobo, can jump into a semi-open cenote and swim among the azure waters.

Photo: Yolanda Lopex-Moldona

Today, grown-up Dr. Yolanda Lopez-Maldonado, along with her team of researchers, is interviewing an older man.

“It’s crazy!” he exclaims. “About 30 years ago my family was able to drink out of our well, but now we just buy bottled water because we get sick when we drink from it.”

“I see,” says Yolanda thoughtfully. “*More and more cenotes are suffering from poor solid waste disposal practices*,” Yolanda thinks as she shakes her head.

“Thank you, Señor,” she says, and walks to take a look at the nearby cenote. The water is brown and murky with plastic wrappers floating around on the top, nothing like the aquamarine waters she once enjoyed.

Yolanda has been extensively documenting and cleaning cenotes around the Yucatan. In the past, her ancestors, the ancient Maya, regarded cenotes as sacred sites and took very good care of them.

Her head is spinning with thoughts and questions. What was the current value of cenotes to the local population, and how were these different from the past? She looks around at her team and spots a little girl peering at them through the trees. She reminds Yolanda of herself when she was younger.

The only way to conserve cenotes for future generations is to teach people about the importance of preserving the only source of groundwater. Although these cenotes might not have the same religious significance for Indigenous people today as they did in the past, they are still vital to their survival—and the ecosystem.

There needs to be renewed respect and awareness for these important natural and cultural sites, Yolanda thought, *and what better way than to explain the rich traditions and history she heard growing up?*

Yolanda looks up from her work and sees more children gathered around. She softens as she smiles.

“Would you like to help?”

Many of the children nod and slowly climb down to the entrance of the cenote cavern.

“Good!” she exclaims, “Now, who would like to hear a story?”