

Tenochtitlan, the City on a Lake

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Tenochtitlan was the capital city of the Aztec Empire. It was placed on Lake Texcoco in Mexico and the island city covered an area of over five square miles. The city was situated on an island in the middle of the lake and was surrounded by many floating fields known as Chinampas. Chinampas were fields that the Aztecs used for farming and agriculture. The Chinampas were formed by laying a base of sticks and brush, which would then be covered by mud from the lakebed. After they grew in the fertile mud, the Chinampa would become rooted to the bottom of the lake. The Chinampas were vital to the Tenochtitlan city because they provided more land for farming, which resulted in enough crops to feed the large population. As the Tenochtitlan city grew they needed more room for housing. The Aztecs began to build on the Chinampas. This enabled the city to keep growing because they could build out onto the lake.

There were three large causeways that connected Tenochtitlan to the mainland. There were also many aqueducts that would supply the city with fresh water because lake Texcoco was slightly brackish and was not suitable for drinking water. The water was salty because the lake was built in a volcanic crater, which made the soil very salient. People moved through the city on canals. The Spanish found them to be much like the ones in the European city of Venice. Aztecs Traveled in canoes for transportation because the city was too large to walk from one end to the other.

Tenochtitlan was a holy city and in its center stood gigantic temples that could be seen from the mainland. These temples were used for religious purposes where human sacrifices were made. The Aztecs were a very religious group of people.

The Aztecs were extremely faithful to their gods. Legend says that, they built Tenochtitlan after one of their priests saw an eagle perched on a cactus with a serpent in his mouth. They saw this as a sign from the gods and built their city on lake Texcoco. The Aztecs worshiped many different gods but the most powerful one was Huitzilopochtli who was the God of the sun. The Aztecs believed that the sun god was fed off the souls of their enemies. They feared that if they could not provide enough human hearts that he would die and the world would end. They thought that this phenomenon had happened five times before and each time all of civilization had died and the world would start over again. The Aztecs sometimes would choose to not conquer a tribe so they would have a tribe to raid and take prisoners to sacrifice. This made them hated and feared by all the surrounding tribes. This hatred towards the Aztecs was instrumental in the Spanish eventually finding allies that would help them to overthrow Tenochtitlan.

The Aztec's religion was a large key to keeping social order. One of the many things that amazed the Spaniards was how clean the city was kept. They later found that it was kept swept and whitewashed as a sign of respect to their gods. They built Tenochtitlan as a holy city and thought that by keeping it clean they were showing their religious discipline. The Aztecs kept the streets swept and the canals clean of trash. The

Aztecs even had public restrooms, which amazed the Spanish. At intervals along the canals were canoes with tents over them for privacy. The canoes would then be brought out to the chinampas to and the contents were used to fertilize them.

The Aztecs would also not allow for “offensive trades”, like leather tanning, to be done in the holy city. Those trades had to be done on the shore of the mainland and then the goods were brought into the city to sell. This was another attempt to keep their city spotless.

The Aztecs first saw white men in 1519 when the astonished Spanish forces of Hernan Cortez came across the splendid city. The Spanish said that they came as ambassadors and were welcomed into the city and were treated with respect and hospitality. They were shocked at the size of the city. Most of what we know about the Aztec culture and their way of life comes from the Spanish records. The Spanish stayed as guests in the city until one night they decided to take the Emperor prisoner and ask for gold as a ransom. The Aztecs gave over the amount of gold that the Spanish had asked for, so the Spanish took the Aztec’s gold then killed their Emperor and then fought their way out of the city. The citizens of Tenochtitlan were infuriated by the unfair murder of their leader, and the Spanish did not escape without many lives were lost on both sides.

After the Spanish robbed the Aztecs of much gold as well as their Emperor, the Spanish forces put together an army of neighboring tribes who had bad blood with the Aztecs. They used the terror and hatred that the surrounding Indians felt against the

Aztecs to win their support in overthrowing Tenochtitlan. After the long and bloody battle Spain tore the great capital city Tenochtitlan to the ground. They only left those artifacts that were too large and massive for them to destroy. The Spanish built a new city on the remains, which was modeled after Spanish Architecture. Many of the same stones and other materials that the Spanish used were from the remains of the destroyed city Tenochtitlan.

Tenochtitlan was a great city and the Aztecs who made it their capital were a great civilization. It is hard to comprehend what made the Spanish start fighting the Aztecs who did nothing but welcome them to their city. In our textbook, I have noticed a few similarities between how the Europeans treated the natives in North America, South America, and Central America with such cruelty. This is sad because the Europeans were representing the Christian faith and sometimes were traveling with missionaries. They always come across as greed driven explorers with no code of honor when they wanted something like gold or land which is very different from the way a true Christian should act to others of any race.

The new Spanish city immediately began to degrade. From 1521 on, it has suffered many different problems. In the late 17th century the Spanish thought they could free up miles of great farming lands by draining the lake. However the lake was too salty and once drained, the salt made the ground unfertile. The Spanish also did damage to the city by digging deep wells to take water from the underground aquifers. The city's population later exploded and with more people came a greater need for water. The city

is now known as Mexico City and is sinking at the amazing rate of approximately 3.6 inches a year, or ten meters in the last century! This problem is largely caused by the 10 million gallons of water which Mexico City is using every. As they take water from under the ground the ground sinks because they are lowering the water table. Now the underground aquifers are dangerously close to collapsing. The next big mistake that Mexico City made was the decision to build so many skyscrapers. This enormous weight added to the problem of the sinking city. Now the city is looking for ways to stay afloat. They have tried pumping water from local rivers to the city instead of using their underground aquifers but the electric bill for the pumps is too large. They have also considered moving the city to a new location but that is not very practical. The best solution seems to be to just keep a close eye on the building and try to conserve water. The cathedral in the middle of the city took so long to build that the building itself began to sink into the ground while it was still under construction, so some of the columns are taller than others. They have been pumping cement under the cathedral to keep it level and so far it has worked. They are trying to make modifications all of their huge business buildings so they will sink evenly. They could of course just let it go, and live with an “*artistic*” skyline like in Pizza, Italy.

Building my own Chinampas

This is a website where you can watch me construct my Chinampa!

[Graham's Project Documentary](#)

I originally wanted to build a model of the Aztec's capital, Tenochtitlan. As I researched, I was amazed by how the Aztecs constructed their chinampas and changed my mind. I decided to make a model of a chinampa to see if I could grow any plants in it. I hoped to learn more about chinampas by building one myself. I wanted to find out more about them through hands on experience.

The first thing I had to do was find a body of water in which I could build my chinampa. I chose to use a children's pool that I bought from Target. I bought the largest pool I could find for a reasonable price. The pool that I chose was eight feet in diameter and 18 inches deep.

The first thing that the Aztecs would do when making a chinampa was to drive wooden stakes into the bottom of the lake. Instead of trying to hammer small stakes into the bottom of the children's pool I decided to make a four-foot by two-foot rectangular base out of one-by-twos. I then drilled holes along the perimeter and fixed the stakes into the holes.

Once I had the rectangular base secured on the bottom of the pool, I began to weave the bottom and sides of the chinampa. This took the majority of my time because I had to make the "basket" dense enough that the dirt would not fall out through the bottom or sides. I also stopped taking the leaves off the branches because I learned that they added to the mass of the base. I would use green sticks instead of dried out branches because they were much easier to bend and weave together. After I had a thick tangle of branches and leaves, I spread some straw over the chinampa bottom and along the walls.

I wanted to make sure that no dirt could fall through the bottom or sides. I then filled the chinampa with cow manure. I had four to five inches of cow manure along the top layer of the chinampa so that it was deep enough to put in the plants I had bought. I planted five New Guinea Inpatients. I chose those flowers because they could handle the most moisture. I later planted two cat grass plants. I plan on leaving my chinampa intact for a few weeks to see if the plants thrive.

I learned three major rules that are vital to building a chinampa. I found these rules by building my model. I had been confused about what the Internet had to say about their structure.

First, I don't think any chinampa could ever float. You would need many cubic feet of brush and dried twigs under the water to float the weight of the dirt on top. Chinampas were not built in deep water. The Indians couldn't have ever driven stakes into the lakebed if the water were even 20 feet deep. Although most pictures make the chinampas look like they are floating (Figure 3), all of the diagrams that I saw had the brush and filler resting on the bottom (Figure 2).

The second vital thing that I learned from building my own chinampa was that the dirt must be above the water level. Although this now seems obvious when I look at old pictures and diagrams, I did not think this would be as important as it is. When I first finished my chinampa it looked great. However, I wanted to put more water into the pool. The morning after I filled the pool with more water, I found that much of the dirt had dissolved. The dirt was falling out through the bottom of the chinampa and there was

standing water in the cow manure. The soil was completely saturated. If I had not lowered the water level, my chinampa would have soon lost all of its soil and the plants' roots would start rotting. This is true for any chinampa. The Aztecs did not make their walls watertight and water would have been just as destructive for them.

The last thing I learned from building my own chinampa was the importance of the walls. The walls serve two functions. First, they are there to provide stability for the whole structure. They make the woven branches stronger. My chinampa became rigid after I wove the sticks around and through the posts. Second, the part of the wall above the waterline needs to hold in the dirt. The straw that I used really helped with this.



Figure 1

Note that the woven base is above the water

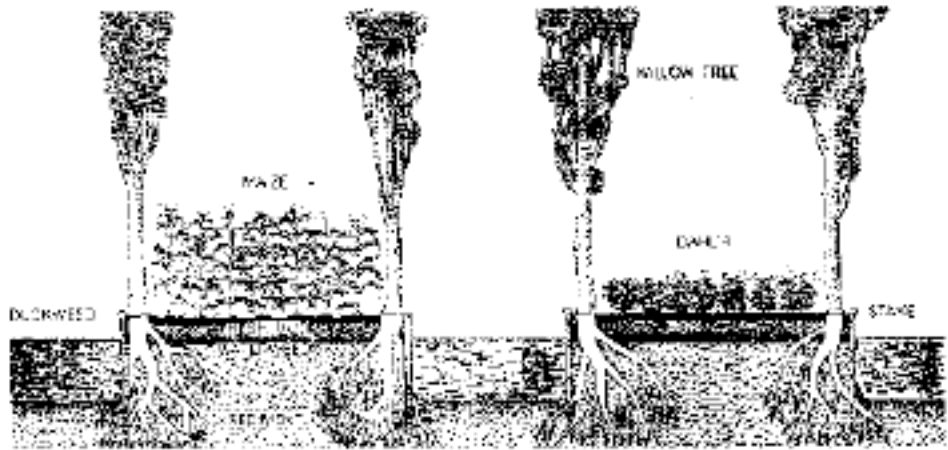


Figure 2



Figure 3

This is a good picture of a chinampa. It shows that all of the dirt is above the waterline.

Bibliography for Tenochtitlan Report Graham Fogwell

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