PAESTA Podcast Series - You Asked, We Answered

Episode 18 - How was the Chesapeake Bay formed?

*Jeff Steinmann, Undergraduate Student, Penn State Brandywine*

Hello everyone, this is Jeff Steinmann. I am a sophomore at Penn State Brandywine. Today I am going to tell everyone about how the Chesapeake Bay was formed. The Chesapeake Bay was formed billions of years ago in Maryland. There are three different events that went into the forming of the Chesapeake Bay, which include: an asteroid hitting the earth, massive glacier forming, and the warming of Earth.

Scientist are not sure if what hit the earth was a comet or an asteroid. Scientist are certain that the comet or asteroid, hit the earth about thirty five million years ago. [1] Scientist say that the asteroid or comet impact zone was off the Delmarva Peninsula. This peninsula connects Delaware, portions of Maryland, and portions of Virginia together. The comet or asteroid that formed the Chesapeake Bay formed a crater that is fifty five miles wide. [1] The crater formed the shape of the land for the Chesapeake Bay. There are two more events left to form the Chesapeake Bay as we know it today.

The second event that helped form the Chesapeake Bay was the massive glacier forming. Scientist say the glacier formed about ten to two million years ago. Between this time a series of ice was formed from the ice age and extended the coastline about one hundred and eighty miles closer. [1] With the expanding of the coastline the next event made the forming of the Chesapeake Bay occur faster and easier.

The last event that completed the formation of the Chesapeake Bay was the warming of Earth. About eighteen thousand years ago the earth begin to warm rapidly, causing the glaciers to melt. [1] With the increase in the amount of water on earth all the rivers and streams expanded. One particular river contributed to the forming of the Chesapeake Bay, and that river is the Susquehanna River, which is located in Pennsylvania. The Susquehanna River flows directly into the Chesapeake Bay, therefore when the glaciers melted the Susquehanna River overflowed into the Chesapeake Bay. The Susquehanna river fed fresh water into the Chesapeake bay, but the river still meets with saltwater closer to the ocean. The mixing of these two types of water classify the Chesapeake Bay as an estuary, which is where salt water and freshwater meet in one place. [3]

Without the three events that occurred to form the Chesapeake Bay one of the largest estuaries in the world would not exist today. So many plants and animals rely on the Chesapeake Bay to provide food, water, and shelter everyday. [2] The Chesapeake Bay is habituated by about two thousand seven hundred species of plants and animals. [3] There are about three hundred and forty eight fish and one hundred and seventy three shell fish. [3] Shell fish include species of clams, oysters, crabs, and starfish. With the diverse amount of species the Chesapeake Bay produces many jobs and seafood for the United States. Therefore, without the events that impacted the formation of the bay, plants, animals, and people would be struggling without the estuary everyone calls the Chesapeake Bay. I want to thank everyone for listening to my podcast. I hope everyone enjoyed it and learned how the Chesapeake Bay was formed. Thank you and have a great day.

*(This audio file was recorded by Jeff Steinmann on April 10, 2016)*

Works Citied

[1] Bay History - Chesapeake Bay Program. (n.d.). Retrieved March 1, 2016, from http://www.chesapeakebay.net/history

[2] Chesapeake Bay Foundation. (n.d.). More Than Just the Bay - Chesapeake Bay Watershed Geography and Facts - Chesapeake Bay Foundation. Retrieved February 8, 2016, from http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-bay-watershed-geographyfactsadpos

[3] Facts & Figures - Chesapeake Bay Program. (n.d.). Retrieved March 1, 2016, from http://www.chesapeakebay.net/discover/bay101/facts