

“Fossils: Understanding Ancient Environments”

Earth Science Assessment Probe

Dr. Gary L. Stringer

Department of Atmospheric Science, Earth Science, and Physics
University of Louisiana at Monroe

The Girl Scout group visited the famous fossil site in northeast Louisiana near Columbia with Dr. Gary L. Stringer, a paleontologist at the University of Louisiana at Monroe. The girls were thrilled to find fossils that were over 36 million years old! They found teeth of several different sharks, teeth and spines of two different rays, teeth and earstones of many different types of saltwater fish, and even bones of an ancient whale. Based on their fossil finds, Dr. Stringer asked the students what they thought the ancient environment might be. The responses of several of the students are listed below. Choose which student you think has the best answer and explain why.

Kisha: You do not enough animals to be able to make a determination of the ancient environment. You have to find lots more fossils to know about the paleoenvironment.

Kendra: Since fish often live in rivers, the ancient environment could have been an area with lots of rivers.

Alex: Almost all sharks and rays are found in oceans, as are saltwater fish and whales. The area was definitely an ocean over 36 million years ago.

Barb: I believe that the area was a large lake over 36 million years ago. These fossils represent animals that could have lived in the large lake.

Explanation:

Key

“Fossils: Understanding Ancient Environments” Earth Science Assessment Probe

Dr. Gary L. Stringer

Department of Atmospheric Science, Earth Science, and Physics
University of Louisiana at Monroe

Answer:

By far, Alex has the best reasoning and answer. It is true that almost all sharks and rays live in the ocean. Also, whales and saltwater fish would be found in the marine environment.