The Hagerman Horse

The Hagerman Valley in south central Idaho was created about 15,000 years ago during the great Bonneville Flood. The great rushing waters of that historic flood cut into the ground and created 600-foot cliffs on the Snake River near the present day town of Hagerman. In 1928, a local cattle rancher named Elmer Cook was digging on these bluffs when he came across some fossilized bones. Elmer wasn’t a paleontologist, but he knew he had found something interesting.

He collected a few of the bones and eventually showed them to a local scientist named Dr. Harold Stearns. The fossils looked like horse bones, so Dr. Stearns decided he needed the help of someone who was an expert on equines. He passed the bones onto Dr. James Gidley of the renowned Smithsonian Institution in Washington D.C. Dr. Gidley was an expert in horse fossils and he knew right away that these bones were an exciting scientific discovery.

The Smithsonian immediately organized an expedition to explore

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Welcome to the fourth grade and the Prospector Club Junior Historian Program. My name is Lucky Noah and I’m in charge of writing your monthly newsletter. Although most of the time I’m out in the mountains looking for gold, my mule and I also have an office in the basement of the State Historical Museum, which is located in Boise, our state’s capitol city. This is the first of eight newsletters you will receive as a Prospector. Each issue will have exciting stories on a different Idaho history topic and fun activities for you and your class to do. For this month’s theme, prepare to go way back in history to ancient Idaho, when camels and saber-toothed cats lived in Idaho. This was the era of the Hagerman Horse.

Lucky Noah
The Hagerman Horse Continued

the site. The work wasn’t easy. Back then, Hagerman was relatively remote. Steep slopes, harsh weather, and rattlesnakes made digging in the Idaho desert a challenging task. Still, the determined crew recovered over three tons of fossils, including five full horse skeletons, over 100 skulls, 48 lower jaws, and numerous other horse bones. They also came across bones from other creatures that lived in ancient Idaho, like saber toothed cats and camels.

For several years, scientists returned to what became known as the horse quarry. Hagerman was an amazing site. Most of the time, paleontologists only have a single bone or bone fragments to study an extinct creature. At the Hagerman horse quarry there were so many bones that scientists could completely recreate the past creatures’ skeletons. Elmer Cook must have been very proud to have made this fascinating discovery.

After studying the bones in their laboratories, paleontologists named the Hagerman horse *Equus simplicidens*. *Equus* is a Latin word that refers to horse-like creatures, including horses, donkeys, and zebras. *Simplicidens* means “simple” or “basic”, because the Hagerman Horse was a basic ancestor of today’s modern horse. Scientists think it lived in North America roughly 3.5 million years ago.

*Equus simplicidens* was more like a zebra then the horses you’re familiar with. Scientists can’t be sure if the creature had stripes, but there are many similarities in the surface of the teeth and in the details evolved over millions of years into what is today’s modern horse. Like many other large mammals of North America like the mammoth, horses eventually disappeared from the continent over 10,000 years ago. Luckily, they survived in other parts of the world. In the 1500’s, Spanish explorers brought horses over from Europe and reintroduced them to our continent. Relatives of the Hagerman horse were once again in Idaho.

The Hagerman horse quarry ultimately became a national monument protected by the government. It now covers 4,300 acres and contains around 300 important historic sites including parts of the Oregon Trail. Fossils from the Hagerman Fossil Beds National Monument have been studied by scientists all over the world. In 1988, the Idaho state legislature named the Hagerman horse the official state fossils. Although the park rangers won’t let you dig for fossils, you can visit the National monument and see examples of these ancient horse bones.

*Scientists working in the Horse Quarry*

By Lisa Peters
What was Idaho like 3.5 years ago? Scientists call that time the Pliocene epoch and the Hagerman area was a very different place. Instead of a desert, it was a grassy wetland like the savannah of Africa. Nearby was a giant lake. This floodplain was home to many prehistoric creatures. Some of them would be familiar, like pelicans, turtles, and frogs. But some of them are long since extinct like camels, saber-toothed cats, and mastodons.

What happened millions of years ago to create the amazing concentration of bones? Most paleontologists agree that there must have been a herd of horses trying to cross a shallow and broad body of water. As we all know, water can be unpredictable and dangerous. The herd must have been carried away by a strong current while they were trying to cross. The soft, sandy bottom provided the perfect condition for their bodies to remain buried intact. 

The Hagerman area during the Pliocene
In 1826 a scientist named James Smithson wrote his last will and testament. In this important document, he promised that upon his death, his fortune could be used to start a scientific research institution in Washington D.C. Smithson died three years later and the famous Smithsonian Institution was born.

Although it started small, the Smithsonian is now one of the largest research facilities in the world. Its main offices are on the National Mall close to the White House and its many museums hold fantastic collections of science, art, history, and culture. Scientists from the Smithsonian travel the globe to collect and study important specimens for the museum.

It was scientist from the Smithsonian who first came to Idaho to study the now famous horse quarry. Their hard work helped make the Hagerman Fossil Beds the important national resource they are.

A mammoth skeleton at the Smithsonian
I love sharing Idaho’s rich history with the school, but writing a newsletter is hard work. That’s where you come in. Each month, I’ll ask for submissions for the next issue. As official Junior Historians, you can write stories, draw pictures, and turn in projects that we’ll print right here in the magazine. This month you can pick from one of the activities listed below or make up your own Hagerman Horse project and send it to our Prospector Headquarters. We’ll take some of your best work and print it in next month’s magazine. Remember to include your name, the town and school where you are from, and the name of your Prospector Club. We can’t wait to see what you come up with!

**Fossils in Your Backyard:** Elmer Cook was probably very surprised to find fossils right near his house. Imagine what it would be like to make such an exciting discovery. Pretend that you are in your back-yard doing some gardening with a shovel and all of a sudden you dig up an amazing fossil. Write us a short story telling us what happened. Did everyone believe you? What creature did the fossil come from? Did you become famous because of your fossil discovery?

**Idaho Symbols:** The Hagerman Horse is the official fossil of the state of Idaho. Did you know though, that we have many other state symbols? There is a state bird, a state fruit, even a state dance. Do a little research about state symbols and pick one of your favorites. Draw us a picture of the symbol and write a short description to tell the rest of us what you learned.

**Extinct in Idaho:** It’s hard to believe that Idaho was once home to giant elephants, camels, and cats with enormous teeth. Many of us know a lot about the animals that live in Idaho today, but we know little about the creatures who walked around millions of years ago. Go the library or the internet and find out some information on one of the extinct animals of Idaho. If you’re a good artist, draw us a picture and write up a short report on your favorite extinct critter.

Send in your work by November 15th to:

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