

Our Founding Fossils

In 1705 large fossil bones were discovered in Claverack, New York. The immense size and weight of a single tooth sent its discoverers speculating to the identity of its former owner. Arguments raged between those that believed it belonged to a giant and those who postulated that it belonged not to a giant man, but a giant beast. For some, the teeth and bones were physical proof of Genesis' antediluvian giants. But, the gentlemen naturalist of the early 18th century had to defer to the Royal Society in London to settle the dispute. By the end of that century American scientists made their own decisions and mistakes, but they were no longer beholden to European scientific authority; when they created a new nation they created their own.

“Tooth of a Giant”

Edward Hyde, the viscount of Cornbury and English governor of the New York Province, dispatched an enormous tooth to the Royal Society, then presided over by Isaac Newton. Hyde had come by the tooth after hearing of its existence during an assembly meeting. Peter Van Bruggen, assembly member from Albany had purchased the tooth from a Dutch-tenant farmer in the early summer of 1705 for a half-pint of rum. He subsequently brought it to the New York assembly meeting to show the curiosity around. When Hyde asked Van Bruggen if he would be willing to part with the tooth, Van Bruggen replied, “it is worth nothing, but if I [Hyde] had a mind to it, ‘twas at my

service.”¹ Hyde immediately posted the tooth to the Secretary of the Royal Society in London, with the words “tooth of a giant,” scrawled across the package.²

Many of the amateur naturalists that discussed the bones of Claverack were clergymen. The large bones and teeth fit into their preexisting notions of giants as recorded in the Holy Bible, and most left it at that. There were other, non-biblical accounts that substantiated the bones as belonging to a human of giant proportions. The reverend poet Edward Taylor recorded a second hand story from the Native people who came to see the bones that the Dutch farmers were unearthing. Their tale recounted from “their fathers” revealed that nearly two and a half centuries before a man existed that stood as “high as the tops of the Pine Trees.” This giant hunted bears, knocking them from the tops of trees, and fished for the huge sturgeon in the local waters where he would catch “3 or 4 or 5 at a time and broil them on the fire for his food.”³

A Family Affair

The bones of Claverack seem at best a colonial curiosity, but they turned into a kind of family Talisman for Edward Taylor’s grandson. Ezra Stiles was only two years old when his grandfather died. Stiles’ mother died when he was born, his father remarried and apparently lost touch with the Hyde side of his family until he was older. As a teen and into his 20s Stiles visited with his mother’s brother Eldad Taylor. It was on these

¹ Paul Semonin. *American Monster: How the Nation’s First Prehistoric Creature Became a Symbol of National Identity*. New York and London: New York University, 2000., 15.

² Semonin. *American Monster.*, 15.

³ Donald E. Stanford. “The Giant Bones of Claverack, New York, 1705.” *New York History* vol. 40, no. 1 (January 1959), 47-61, 56.

visists he learned of his grandfather's poem and papers dealing with the Claverack discoveries. He recounted the Indian legends and the discoveries at Claverack in his own work, *Itineraries*, in 1760.⁴

Stiles continued to hear of giant bones dug from the earth and in some instances was even presented with specimens. In 1777 Reverend Dr. David Macclure brought stiles a giant tooth discovered in Ohio. Four years later, Colonel David Humphreys, an aid to General George Washington and close friend to Stiles, told Stiles of large bones that General Washington and "a sleigh full of his men" examined in 1780. Humphrey's told Stiles that Washington said they were similar to bones he had seen in Virginia that had come from Ohio. Stiles wrote with conviction in his diary, "They all take these bones to belong to quadrupeds. I suppose them to be human—like the bones and teeth in Claverack."⁵

Ezra Stiles was appointed President of Yale University in 1778. Throughout the 1780s Stiles continued to receive accounts and teeth from friends, and travelers. Most accounts were coming from areas known as salt licks near the Ohio River in Kentucky. It was during this time that Stile wrote a "very long, detailed, and spirited" letter to Thomas Jefferson. In his letter Stiles refuted the European scientists notions that the large bones found in the American Colonies and elsewhere were bones of elephants. Stiles staked his reputation on the bones belonging to a giant race of humans, and presented his and his grandfather's research as proof and assistance in strengthening Jefferson's argument against Count Comte de Buffon's degeneracy of the new world theory.

⁴ Cora E Lutz. "Ezra Stiles and the Bones of the Giant at Claverack." *The Yale University Library Gazette*. vol. 57, no ½ (October 1982), 18-25., 18-19.

⁵ Lutz. "Ezra Stiles.", 21-22.

Stiles commitment to the giant theory never waned, but it did become overshadowed by his duties as Yale president. These early finds, those described by his grandfather, and continued first hand observations and accounts collected by Stiles, and many other naturalists in the early American Colonies, and the young republic after the Revolutionary War, paved the way for a truly American version of Paleontology—a version that took shape in the field, not in the lecture hall. The earliest accounts of the Claverack fossil finds reveal that it yielded a curiosity and a poem. In 1705, it fueled biblical interpretation debates, and yielded a parcel sent to the Royal Society. By 1796 when Jefferson received fossils from Colonel John Stuart, it was a different story. Jefferson described this “giant claw” at the *American* Philosophical Society.

American Paleontology

In 1705 Edward Hyde sent his tooth of a giant to the Royal Society. By 1796 Jefferson was describing American bones in Philadelphia. Even though Jefferson misidentified the fossil as belonging to a giant lion, the correction came in 1799 from another American—Dr. Caspar Wistar. Continuing the growth of American Paleontology Charles Wilson Peale, famous portraitist of the American Revolution, organized what appears to be the first American scientific expedition in 1801. In Orange County, New York on what is now known as Peale’s Barber Farm Mastodon Exhumation Site, Peale revolutionized fossil recovery. What had previously been just random fortuitous fossil finds along rivers was now a systematic process of excavation. The work yielded the

entire remains of an extinct behemoth and when Peale presented it in his Natural History Museum is became "the world's first fully articulated prehistoric skeleton."⁶

As President Jefferson tasked Meriwether Lewis and William Clark's *Corps of Discovery* to be on the lookout for living versions of the animals Peale was finding in New York. No living mammoths or mastodons were discovered although Lewis and Clark did send huge amounts of fossil materials back to Jefferson. Both Lewis and Clark had experience with fossils that interested Jefferson. In 1803 on route to meet William Clark in Louisville to prepare for their forthcoming expedition Lewis was obliged to stop and meet Dr. William Goforth and examine his collection of fossils that were coming from Big Bone Lick, Kentucky.⁷ Goforth offered to superintend excavations at Big Bone Lick, but Jefferson declined. Instead in 1807 President Jefferson organized an expedition to Big Bone Lick under superintendent William Clark. Fresh from the success of the *Corps of Discovery* and with David Ross's permission to dig on his land, Clark and his brother George Rogers arrived at Big Bone Lick on September 6, 1807 and under the model of Peale's earlier exhumation and the now century old interest in the bones of Claverack, laid the foundation for American Vertebrate Paleontology.⁸

Conclusion

The development of paleontology in the United States follows an interesting parallel with the development of the United States itself. In 1705, giant bones found in

⁶ ["Weekly Highlight 11/06/2009 Peale's Barber Farm Mastodon Exhumation Site"](#). (Accessed May 31, 2013)

⁷ Stanley Hedeon. *Big Bone Lick: The Cradle of American Paleontology*. University of Kentucky Press, 2008, 88.

⁸ Hedeon. *Big Bone Lick*, 98.

the colonial province of New York were seen as a curiosity, a point of discussion and sent back “home” to the Royal Society for show and analysis. Little was done in the case of science with the discoveries. Edward Taylor’s epic poem about a giant was all that promoted Claverack beyond a mere oddity. Taylor’s grandson took up the torch and his interest in the bones, his grandfather’s papers, and eventual rise to the presidency of Yale University managed to funnel a large number of specimens and accounts into one place. Stiles also acted as a bridge between the early accounts and Jefferson’s quest to prove Count Buffon wrong.

These changes within the American Colonies between the discovery at Claverack in 1705 and Colonel John Stuart in 1796 cannot wholly be separated from one another. Just as they impacted government, taxes, and colonial life they had a profound impact on science. Less than 20 years after the end of the Revolutionary War Americans were presenting scientific papers at American Philosophical Society Meetings as well as reviewing and correcting mistakes. American scientific expeditions were conducted to exhume fossils first from New York and then from Kentucky. Scientific endeavors were undertaken alongside the building of the new Republic.

Far from being a simple sideline to the birth of America, the birth of American Paleontology is part of that narrative. Not only was it influenced by the politics of the time, but also it was also influential to the politics of the time. These giant bones were used to augment an argument between the established scientific authority in the old and the budding scientific authority of the new, they were some of our first exhibitions of America in Europe, and they are as part of the shaping of American history as taxes and revolution. The focus on fieldwork, excavation, and expedition, is a markedly American

aspect to early paleontology. The birth of American Paleontology came decades before the first dinosaurs were discovered. Since the discovery of those “terrible lizards” and the subsequent paleontological adventures in the American West, the earliest days of American Paleontology have been overshadowed, forgotten, or footnoted. In light of the earliest days of the Republic and American Paleontology it is easy to see how westward expansion and scientific authority led to the now infamous Bone Wars.