

Famous New Yorker Othniel Charles Marsh

During the 19th century, while many Americans went west to find gold, Othniel Charles Marsh went west to find dinosaurs. He struck it rich for everyone interested in the history of life on Earth.

Othniel Charles Marsh was born in Lockport, Niagara County, on October 29, 1831. The Marshes were small farmers, but Othniel's uncle on his mother's side was George Peabody, a wealthy banker and the "father of American philanthropy." After Othniel's mother died when he was three, Peabody managed her estate so Othniel would get a generous inheritance when he turned 21.

Marsh used the money to enroll in the Phillips Andover Academy, where an interest in minerals became a passion for collecting fossils – the remains of ancient life in mineral form. Peabody later paid Marsh's way through Yale. After graduating, Marsh convinced Peabody to fund a natural history museum at Yale and a professorship in paleontology – the study of ancient life.

Paleontology had made rapid strides by the 1860s. Fossils confirmed that giant reptiles existed millions of years ago – the word "dinosaur" was only coined in 1831. Charles Darwin's theory of natural selection, published in 1859, helped scientists understand where fossils fit in the history of evolution. Marsh met Darwin and other paleontologists during his advanced studies in Europe. After he took over the Yale professorship in 1866, he sought more pieces of the evolutionary puzzle in the vast American west.

Between 1870 and 1873 Marsh led four expeditions in search of fossils. "Buffalo Bill" Cody was one of the guides on the first trip as Marsh traveled through Native American territory with U.S. Cavalry escorts. He negotiated with the Lakota Sioux for the safe transport of fossils to Yale, and became an advocate for Native Americans back east.

Marsh's expeditions weren't alone in the search for fossils. Just as there were gold rushes, there was a "bone rush" – and some called it a "bone war." Marsh and his rivals raced to identify as many different species as they could and claim credit for them in scientific journals. Their research teams spied on each other, sometimes stole from each other, and sometimes sabotaged each other's digs. Former academic colleagues became bitter enemies during the bone rush.

The intense competition sometimes led Marsh to make mistakes. After discovering a large, long-necked plant-eating dinosaur and calling it *Apatosaurus*, Marsh later claimed that a similar set of remains was a separate dinosaur species. Both were actually of the same species. Ironically, while paleontologists still call the creature *Apatosaurus*, most people know it better by the name Marsh used the second time: *Brontosaurus*.

Marsh's genuine discoveries far outweighed his errors and his misdeeds during the "Bone Wars." Along with *Apatosaurus*, Marsh discovered such famous dinosaur species as *Stegosaurus* and *Triceratops*. He made major discoveries in the evolution of horses and birds, and was one of the first scientists to suggest that birds evolved from dinosaurs. By the time of his death on March 18, 1899, Marsh had named nearly 500 different species. Two more were named after him in the 20th century in tribute to Othniel C. Marsh's contributions to our knowledge of ancient life.



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Lockport is located about 30 miles northeast of Buffalo. The name is derived from a set of Erie canal locks within the city.

To learn more about paleontology go to the National Museum of Natural History's Paleontology for Kids website at www.amnh.org/explore/ology/paleontology. This is one of a series of Famous New Yorker profiles written by Kevin Gilbert for the NYNPA-Newspaper In Education. All rights reserved 2014.