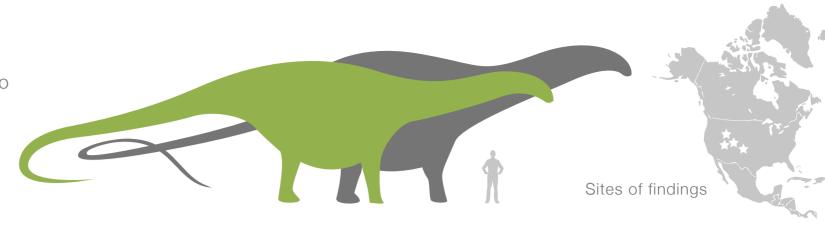
Brontosaurus

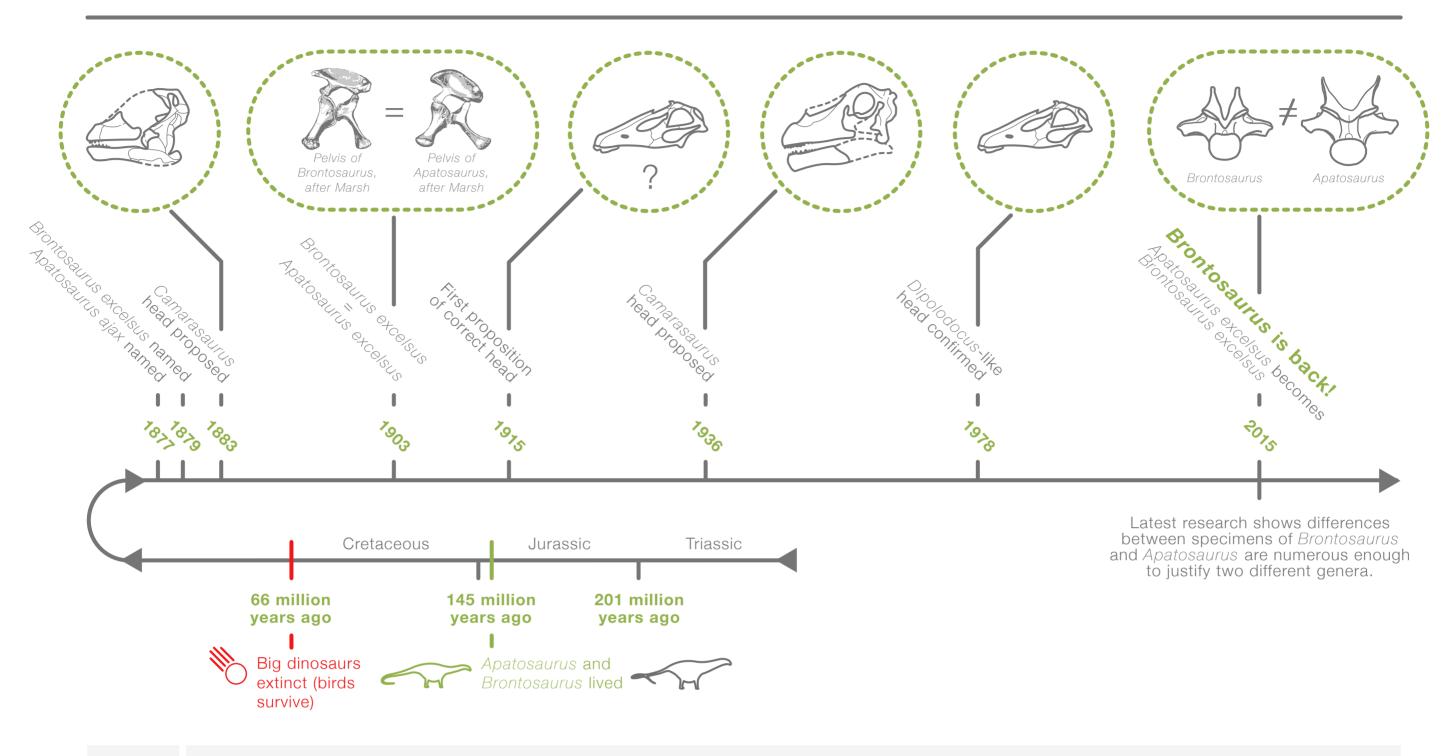
Lived 150 million years ago
Western United States
Meaning: Thunder lizard
Diet: Herbivorous
Weight: 30.5 tonnes

Apatosaurus

Lived 150 million years ago Western United States Meaning: Deceptive lizard Diet: Herbivorous

Weight: 41.3 tonnes





1877 Apatosaurus ajax was named by Othniel C. Marsh (Colorado)

1879 Brontosaurus excelsus was named by Othniel C. Marsh (Wyoming)

1879 Apatosaurus laticollis was named by Othniel C. Marsh (Colorado)

1881 Brontosaurus amplus was named by Othniel C. Marsh (Wyoming)

Marsh published a reconstruction of *Brontosaurus*. Because none of the skeletons were found with a complete skull, Marsh reconstructed a hypothetical skull, based on comparisons with the similarly massively built *Camarasaurus* from the same area and time (which was later found to be wrong, see below). This was the first published reconstruction of an entire skeleton of a long-necked dinosaur.

1902 Elosaurus parvus was named by O.A. Peterson and Charles W. Gilmore (Wyoming)

Elmer Riggs stated that differences between the species of *Brontosaurus* and *Apatosaurus* were not numerous enough to have two different genera. *Brontosaurus* excelsus and *Brontosaurus* amplus were included in *Apatosaurus*, and the new combinations *Apatosaurus* excelsus and *Apatosaurus* amplus were created.

The first mount of a long-necked dinosaur was presented at the American Museum of Natural History in New York, it was an *Apatosaurus* (not clear which species).

Apatosaurus louisae was named by William Holland (Utah). Holland found that Apatosaurus was actually more similar to the slender Diplodocus from the same area and time than to Camarasaurus, and proposed that a skull similar to already known Diplodocus skulls should be the real skull of Apatosaurus.

1936 Charles W. Gilmore published a detailed description of *Apatosaurus louisae* and another skeleton, which was found together with the reference specimen of *Elosaurus parvus*. He identified the second specimen as *Apatosaurus excelsus*, and argued for a *Camarasaurus*-like skull, supporting Marsh.

John S. McIntosh and David Berman finally settled the question concerning the skull of *Apatosaurus*, and showed that Holland was right.

Apatosaurus had a *Diplodocus*-like skull. The popular myth that *Brontosaurus* was a scientific error, and actually an *Apatosaurus* with a *Camarasaurus* head, was born, even though this is not entirely true.

1994 Apatosaurus yahnahpin was named by B. James Filla and Pat D. Redman, based on material from Wyoming.

Apatosaurus yahnahpin was renamed as Eobrontosaurus yahnahpin by Robert T. Bakker, because he thought there were enough differences between Apatosaurus yahnahpin and the other Apatosaurus species such that Eobrontosaurus should be a unique genus.

A first phylogenetic study of the *Apatosaurus* species was published by Paul Upchurch and colleagues, which found that *Elosaurus* parvus was another species of *Apatosaurus*. They considered valid the following four species: *Apatosaurus ajax*, *Apatosaurus excelsus*, *Apatosaurus parvus*, and *Apatosaurus louisae*. They did not include *Eobrontosaurus yahnahpin* in their study.

Based on new finds, and a much larger dataset compared to the study of Upchurch and colleagues, Emanuel Tschopp and colleagues showed that differences between the specimens of *Brontosaurus* and the specimens from *Apatosaurus* are numerous enough to justify that there were two different genera. This also results in some species being moved from *Apatosaurus* into *Brontosaurus*. The now accepted species are the following: *Apatosaurus ajax*, *Apatosaurus louisae*, *Brontosaurus excelsus*, *Brontosaurus yahnahpin*, *Brontosaurus parvus*.

2015

1883

1903

1915