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| Stegosaurus  Adrian | |
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|  | | | Discovery Stegosaurus is a well-known dinosaur genus that was discovered during the Bone Wars of the late 19th century. The first fragments of Stegosaurus were collected by Arthur Lakes in Colorado in 1877, and they were described by Othniel Charles Marsh as a new species, Stegosaurus armatus. Later, more complete specimens were attributed to Stegosaurus armatus, but the type specimen was found to be dubious, so it was replaced with Stegosaurus stenops as the type species. Edward Drinker Cope also named a stegosaurian, Hypsirhophus discurus, but it is now considered a synonym of Stegosaurus. Arthur Lakes made another discovery in 1879 at Como Bluff, where he found several large Stegosaurus fossils, including the type specimen of Stegosaurus ungulatus, which was one of many fossils found at the quarry. The greatest Stegosaurus discovery came in 1885 when a nearly complete, articulated skeleton of a subadult was discovered by Marshall P. Felch in Garden Park, Colorado. This skeleton was expertly prepared and shipped to Marsh, who named it Stegosaurus stenops in 1887 and used it to complete the first attempt at a reconstructed Stegosaurus skeleton. | | |
|  | | | Evolution, Physical characteristics Diplodocus, on the other hand, had a long neck that made up about half of its total length. Its neck consisted of 15 vertebrae, each of which was approximately 0.6 meters long. Diplodocus also had a long tail consisting of about 80 vertebrae, which could be used as a whip-like weapon against predators.  In comparison to its body, Diplodocus had a relatively small head and had peg-like teeth with which it could strip leaves from trees. It was around 27 meters long and weighed up to 25 tons.   Paleobiology Diplodocus is one of the most extensively studied dinosaurs due to the abundance of skeletal remains available. Its lifestyle has been the subject of various theories over the years, including suggestions that it was an aquatic animal. However, since the 1970s, it has been widely accepted that Diplodocus was a firmly terrestrial animal that browsed on trees, ferns, and bushes. | | |
|  | | | Posture The posture of Diplodocus has been depicted in various ways over the years. Initially, it was portrayed with splayed legs and a lizard-like gait, which was later contested by evidence of sauropod footprints. Later portrayals showed Diplodocus with a high neck posture, allowing them to graze from tall trees. However, studies have concluded that the neutral posture of Diplodocus neck was close to horizontal, and the nuchal ligament may have held the neck in this position. The long neck of Diplodocus has been a source of controversy, with studies indicating that the longest necks would have required a 1.6-ton heart, and some proposing that auxiliary "hearts" in their necks would have been necessary to pump blood up to the next "heart". Diet and feeding Diplodocines, including Diplodocus, have unusual teeth compared to other sauropods, with elliptical crowns and wear patterns on the labial side. This suggests that they engaged in unilateral branch stripping, using one row of teeth to strip foliage while the other row acted as a guide and, allowing it to rear up into a bipedal posture with relatively little effort. Lastly, ecological differences between adults and juveniles have been observed in Diplodocus, with a juvenile skull showing a different feeding pattern than adult skulls. Recent discoveries Several new Diplodocus specimens have been discovered in recent years, including Seismosaurus hallorum, which was initially named in 1991 and later synonymized with Diplodocus in 2004. The Mother's Day Quarry in Montana was also discovered in 1994 and has since produced many isolated Diplodocus bones from juveniles to adults, as well as articulated specimens and skin impressions. One notable find from the quarry is a nearly complete skull of a juvenile Diplodocus, which highlights ontogenetic dietary changes in the genus. | | |

