

The first giant titanosaurian sauropod from the Upper Cretaceous of North America

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Argentinosaurus (Cenomanian, Argentina) is generally accepted as being the largest dinosaur so far discovered and is one of several giant titanosaurian sauropods known from the Upper Cretaceous of South America and Asia, but surprisingly not from North America. Here we present the first evidence of giant titanosaurian sauropods from the Upper Cretaceous of North America: two enormous vertebrae and a partial femur, from the Naashoibito Member of the Ojo Alamo Formation, New Mexico, and referred to Alamosaurus sanjuanensis. One of the new vertebrae, a posterior cervical, is comparable in size to a posterior cervical described for Puertasaurus: an Argentinosaurus—sized titanosaurian from the Maastrichtian of Argentina. This makes A. sanjuanensis the largest dinosaur from North America, and among the largest in the world. These findings indicate that A. sanjuanensis is diagnosed based on immature remains, which may have implications for cladistic analyses.

Key words: Dinosauria, Sauropoda, Titanosauria, *Alamosaurus*, body mass, Naashoibito Member, Ojo Alamo Formation, New Mexico, North America.

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