# Only second Jurassic dinosaur ever found in Antarctica

December 10 2007

A new genus and species of dinosaur from the Early Jurassic has been discovered in Antarctica. The massive plant-eating primitive sauropodomorph is called Glacialisaurus hammeri and lived about 190 million years ago.

The recently published description of the new dinosaur is based on partial foot, leg and ankle bones found on Mt. Kirkpatrick near the Beardmore Glacier in Antarctica at an elevation of more than 13,000 feet.

“The fossils were painstakingly removed from the ice and rock using jackhammers, rock saws and chisels under extremely difficult conditions over the course of two field seasons,” said Nathan Smith, a graduate student at The Field Museum. “They are important because they help to establish that primitive sauropodomorph dinosaurs were more broadly distributed than previously thought, and that they coexisted with their cousins, the true sauropods.”

The findings were published online Dec. 5 in the *Acta Palaeontologica Poloncica* (see www.app.pan.pl/). Diego Pol, a paleontologist at the Museo Paleontológico Egidio Feruglio in Chubut, Argentina, is the other co-author of the research.

Sauropodomorph dinosaurs were the largest animals to ever walk the earth. They were long-necked herbivores and include Diplodocus and Apatosaurus. Their sister group is the theropods, which include

Tyrannosaurus, Velociraptor, and modern birds.

Glacialisaurus hammeri was about 20-25 feet long and weighed about 4-6 tons . It was named after Dr. William Hammer, a professor at Augustana College who led the two field trips to Antarctica that uncovered the fossils. Glacialisaurus belongs to the sauropodomorph family Massopsondylidae, which may represent a secondary radiation of basal sauropodomorphs during the Early Jurassic.

Currently, the development and evolutionary relationships of the sauropodomorph dinosaurs are hotly debated by paleontologists. This discovery, however, helps to resolve some of this debate by establishing two things. First, it shows that sauropodomorphs were widely distributed in the Early Jurassic—not only in China, South Africa, South America and North America, but also in Antarctica.

“This was probably due to the fact that major connections between the continents still existed at that time, and because climates were more equitable across latitudes than they are today,” Smith said.

Second, the discovery of Glacialisaurus hammeri shows that primitive sauropodomorphs probably coexisted with true sauropods for an extended period of time. The recent discovery of a possible sauropod at roughly the same location in Antarctica lends additional evidence to the theory that the earliest sauropods coexisted with their basal sauropodomorph cousins, including Glacialisaurus hammeri, during the Late Triassic and Early Jurassic, Smith and Pol conclude in their research findings.

Source: Field Museum

Citation: Only second Jurassic dinosaur ever found in Antarctica (2007, December 10) retrieved 20 April 2024 from https://phys.org/news/2007-12-jurassic-dinosaur-antarctica.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.