

America's smallest dinosaur uncovered

September 23 2008

An unusual breed of dinosaur that was the size of a chicken, ran on two legs and scoured the ancient forest floor for termites is the smallest dinosaur species found in North America, according to a University of Calgary researcher who analyzed bones found during the excavation of an ancient bone bed near Red Deer, Alberta.

"These are bizarre animals. They have long and slender legs, stumpy arms with huge claws and tweezer-like jaws. They look like an animal created by Dr. Seuss," said Nick Longrich, a paleontology research associate in the Department of Biological Sciences. "This appears to be the smallest dinosaur yet discovered in North America."

Called *Albertonykus borealis*, the slender bird-like creature is a new member of the family Alvarezsauridae and is one of only a few such fossils found outside of South America and Asia. In a paper published in the current issue of the journal *Cretaceous Research*, Longrich and University of Alberta paleontologist Philip Currie describe the specimen and explain how it is likely specialized in consuming termites by using its small but powerful forelimbs to tear into logs.

"Proportionately, the forelimbs are shorter than in a Tyrannosaurus but they are powerfully-built, so they seem to have served a purpose," Longrich said. "They are built for digging but too short to burrow, so we think they may have been used to rip open log in search of insects."

Longrich studied 70 million-year-old bones that were collected on a dig led by Currie at Dry Island Buffalo Jump Provincial Park in 2002 where

the remains of more than 20 *Albertosaurus sarcophagus* individuals were found. Albertosaurs are a type of tyrannosaur. The bones were placed in storage at the Royal Tyrrell Museum and Longrich came across them while trying to compare *Albertosaurus* claws to another dinosaur species.

"This is the oldest and most complete dinosaur of its kind known from North America and it provides evidence that these dinosaurs migrated to Asia through North America," he said.

Longrich, who specializes in studying dinosaur-era ancestors of birds, completed his PhD at the University of Calgary under the supervision of zoology professor Anthony Russell. In September 2006 Longrich argued that that earliest known ancestor of birds, a feathered creature called *Archaeopteryx*, likely flew with wings on all four limbs after examining fossils originally collected in Germany in 1861.

"You can really find amazing things if you just keep looking at fossils we already have sitting in museum collections," he said. "The number of dinosaur discoveries is actually accelerating because we just keep digging up more material to work with."

Citation: The paper "*Albertonykus borealis*, a new alvarezsaur (Dinosauria: Theropoda) from the Early Maastrichtian of Alberta, Canada: implications for the systematics and ecology of the Alvarezsauridae" by Nicholas R. Longrich and Philip J. Currie is published in the August, 2008 edition of the journal *Cretaceous Research*.

Source: University of Calgary

Citation: America's smallest dinosaur uncovered (2008, September 23) retrieved 10 April 2024

from <https://phys.org/news/2008-09-america-smallest-dinosaur-uncovered.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.