

Scientists reveal new species of dog-sized dinosaur

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This is a life reconstruction of the new pachycephalosaurid dinosaur *Acrotholus audeti*. Credit: Julius Csotonyi

Scientists have named a new species of bone-headed dinosaur

(pachycephalosaur) from Alberta, Canada. *Acrotholus audeti* (Ack-RHO-tho-LUS) was identified from both recently discovered and historically collected fossils. Approximately six feet long and weighing about 40 kgs in life, the newly identified plant-eating dinosaur represents the oldest bone-headed dinosaur in North America, and possibly the world. Research describing the new species is published May 7, 2013 in the journal *Nature Communications*.

Acrotholus means "high dome", referring to its dome-shaped [skull](#), which is composed of solid bone over 10 centimeters (two inches) thick. The name *Acrotholus audeti* also honors Alberta rancher Roy Audet, on whose land the best specimen was discovered in 2008. *Acrotholus* walked on two legs and had a greatly thickened, domed skull above its eyes, which was used for display to other members of its [species](#), and may have also been used in head-butting contests. *Acrotholus* lived about 85 million years ago.

The new dinosaur discovery is based on two skull 'caps' from the Milk River Formation of southern Alberta. One of these was collected by the Royal Ontario Museum (ROM) over 50 years ago. However, a better specimen was found in 2008 by University of Toronto graduate student Caleb Brown during a field expedition organized by Dr. David Evans of the Royal Ontario Museum and University of Toronto, and Dr. Michael Ryan of The Cleveland Museum of Natural History.



This is the skull holotype specimen of *Acrotholus audeti*, found by Caleb Brown in 2008. Credit: Brian Boyle, ROM

"*Acrotholus* provides a wealth of new information on the evolution of bone-headed [dinosaurs](#). Although it is one of the earliest known members this group, its thickened skull dome is surprisingly well-developed for its [geological age](#)," said lead author Dr. David Evans, ROM Curator, Vertebrate Palaeontology. "More importantly, the unique fossil record of these animals suggests that we are only beginning to understand the diversity of small-bodied plant-eating dinosaurs."

[Small mammals](#) and reptiles can be very diverse and abundant in modern ecosystems, but small dinosaurs (

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