

***Adalatherium* FACT SHEET**

- **What is the discovery?** A new, bizarre 66-million-old mammal in Madagascar called *Adalatherium*.
- **How Rare is This?** The skeleton is the most complete for any Mesozoic (~186 million years long) mammal yet discovered in the southern hemisphere, and the only one for a poorly known but broadly distributed group of mammals called gondwanatherians.
- **Who discovered *Adalatherium*?** An international team of researchers, led by Dr. David Krause, senior curator of vertebrate paleontology at the Denver Museum of Nature and Science.
- **What was *Adalatherium*?** *Adalatherium* was a gondwanatherian mammal, a group that went extinct about 45 million years ago.
- **What does *Adalatherium* mean?** It means “crazy beast,” derived from the Malagasy word for crazy (“adala”) and the Greek word for beast (“therium”).
- **Total Length of *Adalatherium*** = 52 cm (20.5 inches).
- **Estimated Body Mass of *Adalatherium*** = 3.1 kg (6.8 lbs). It is the third largest known Mesozoic mammal from the southern hemisphere (most mammals at the time were shrew or mouse-sized) and was about the size of a living Virginia opossum or ring-tailed lemur.
- **Time:** Latest Cretaceous period (near end of the “Age of Dinosaurs”), ~66 million years ago.
- **Place of Discovery:** northwestern Madagascar. Madagascar is the 4th largest island in the world and lies in the Indian Ocean at a minimum distance of 430 km (267 miles) from the east coast of Africa. Madagascar became an island ~88 million years ago. It was previously attached to the Indian subcontinent and, before that, to Antarctica, and, before that, to Africa.
- **Paleoclimate:** Highly seasonal with long dry season and short rainy season.
- **Taphonomy (How was *Adalatherium* buried)?** *Adalatherium* was probably buried in a debris flow (like a flash flood but with lots of sediment) during the rainy season soon after death or perhaps even while still alive.
- **When was *Adalatherium* discovered?** 1999
- **After finding the original specimen, how many more specimens of *Adalatherium* were discovered?** None.
- **What did *Adalatherium* eat?** Plants, although we don’t know what kind.
- **What ate *Adalatherium*?** There were at least two meat-eating dinosaurs (*Majungasaurus* and *Masiakasaurus*) and two big crocodiles (*Majungasuchus* and *Miadasuchus*) that probably dined on *Adalatherium*. Another potential predator was the constrictor snake *Madtschia madagascariensis*; at 25' long and weighing over 100 lbs., it is the largest snake known from the entire Mesozoic of the world.
- **How did *Adalatherium* get around?** *Adalatherium* was capable of walking and running, but it was probably also a digger.
- **Interesting features:**
 - It has primitive features in its snout region (a septomaxilla bone) that hadn’t been seen for a hundred million years in the lineage leading to modern mammals.
 - It had more holes (foramina) on its face than any known mammal, holes that served as passageways for nerves and blood vessels supplying a very sensitive snout that was covered with whiskers.
 - There is one very large hole on the top of its snout for which there is just no parallel in any known mammal, living or extinct.
 - The teeth of *Adalatherium* are vastly different in construction than any known mammal.

- Its backbone had more vertebrae than any Mesozoic mammal and one of its leg bones was strangely curved.
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