

# Multituberculate

## Multituberculates

Temporal range: early [Jurassic](#)-  
end [Eocene](#)  
~200 to ~34 million years ago

Skull of *Ptilodus*

## Scientific classification

Kingdom: [Animalia](#)

Phylum: [Chordata](#)

Class: [Mammalia](#)

Subclass: [Allotheria](#)

Order: †**Multituberculata**  
[Cope](#), 1884

## Suborders

- †[Cimolodonta](#)
- †[Plagiaulacida](#)

The **multituberculates** were a group of [rodent](#)-like [mammals](#) which survived for about 166 million years – the longest fossil history of any mammal line.<sup>[1][2]</sup>

They were eventually outcompeted by rodents, becoming extinct during the late [Eocene](#).<sup>[3]</sup>

At least 200 species are known, ranging from mouse-sized to beaver-sized. These species occupied many ecological [niches](#), ranging from burrow-dwelling to squirrel-like tree-dwelling.<sup>[4]</sup>

Multituberculates are usually placed outside both the two main groups of living mammals, the [Theria](#) ([placentals](#) and [marsupials](#)), and [monotremes](#). Some [cladistic](#) analyses put them closer to Theria than to monotremes.<sup>[5][6]</sup>

## Biology

[[change](#) | [change source](#)]

The multituberculates had a head anatomy similar to rodents. They had cheek-teeth separated from the chisel-like front teeth by a wide tooth-less gap (called the *diastema*). Each cheek-tooth displayed several rows of small cusps (or [tubercles](#), hence the name) which worked against similar rows in the teeth of the jaw. It was an efficient chopping device.

Most small multituberculates would have eaten [seeds](#) and [nuts](#), supplemented with [insects](#), [worms](#), and [fruit](#).

The structure of the [pelvis](#) in the Multituberculata suggests that they gave birth to tiny helpless young, similar to modern [marsupials](#).<sup>[4][7]</sup>

## References

[[change](#) | [change source](#)]

[Wikispecies](#) has information on: ***Multituberculata***.

- ↑ Anantharaman S. et al. 2006 (2006). "[A possible late Cretaceous "haramiyidan" from India](#)" (PDF). *Journal of Vertebrate Paleontology*. **26** (2): 488–490. doi:10.1671/0272-4634(2006)26[488:APLCHF]2.0.CO;2. S2CID 41722902.
- ↑ McKenzie, Garry D. (ed.). "[New evidence for palaeogeographic intercontinental Gondwana relationships based on late Cretaceous-earliest Palaeocene coastal faunas from peninsular India](#)". *Gondwana six: stratigraphy, edimentology, and paleontology*. American Geophysical Union. pp. 207–218. doi:10.1029/GM041p0207. ISBN 978-0-87590-067-4. {{cite book}}: Unknown parameter |authors= ignored (help)
- ↑ Krause, David W. 1986. Competitive exclusion and taxonomic displacement in the fossil record: the case of rodents and multituberculates in North America. *Contributions to Geology* (Special Paper 3): 95–117.
- ↑ 4.0 4.1 Weil, Anne (1997). "[Introduction to Multituberculates: the "lost tribe" of mammals](#)". Berkeley: University of California Museum of Paleontology.
- ↑ Benton, Michael J. 2004. *Vertebrate palaeontology*. p. 300
- ↑ Carrano, Matthew T. et al 2006. *Amniote paleobiology: perspectives on the evolution of mammals, birds, and reptiles*. University of Chicago Press. p358. ISBN 0-226-09478-2
- ↑ Kielan-Jaworowska, Zofia, Richard L. Cifelli, and Zhe-Xi Luo 2005. *Mammals from the Age of Dinosaurs: origins, evolution, and structure*. p. 299

Retrieved from "<https://simple.wikipedia.org/w/index.php?title=Multituberculate&oldid=8723822>"