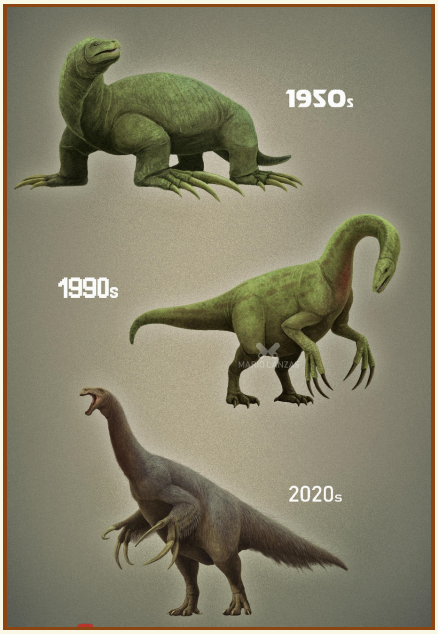
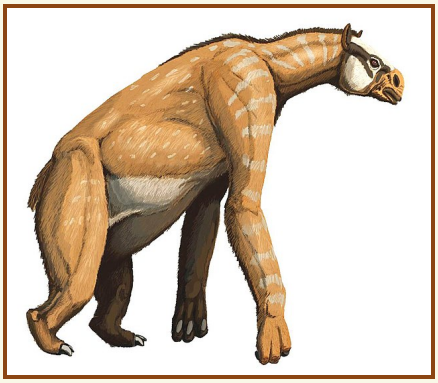
Coinhabitants

- Tarbosaurus
- Saurolophus
- Deinocheirus
- Protoceratops
- Gallimimus
- Velociraptor
- Oviraptor
- Tarchia



Ref 1 Therizinosaurus over the years



Ref 2 Chalicotherium

Ref 3 Therizinisauridae

Discovery

Therizinosaurus Cheloniformis, or "scythe lizard," was first discovered in the late 1940s by Evgeny Maleev in Mongolia. Its identification was initially puzzling due to its unusual characteristics: a long neck, small head, and massive build, coupled with enormous claws that were mistakenly thought to be ribs. Named for its supposed resemblance to a turtle (Ref 1), from the Greek "chelone" for turtle and Latin "forma" for shape, it took until the late 20th century for scientists to correctly classify it as a dinosaur within the theropod group, specifically the Therizinosauridae family.

Paleobiology

Therizinosaurus exhibited a body plan similar to the extinct mammal Chalicotherium (Ref 2), suggesting convergent evolution. This body structure, also comparable to modern gorillas, points to a herbivorous lifestyle, although it is still disputed due to its theropod heritage. The dinosaur likely sat while feeding, using its strong arms and elongated neck to harvest vegetation without exerting much effort. Studies suggest that while Therizinosaurus's claws may not have been used for precise tasks or defense, they were likely instrumental in grasping or pulling foliage, a theory supported by the robust nature of their arms and resistance to stress. Recent research, however, questions the functional necessity of these claws, proposing they might have been more for display, given the absence of identifiable mechanical functions.

Evolution and Classification

Belonging to the theropod group, this dinosaur represents a unique evolutionary path that diverged from its carnivorous ancestors to become a herbivore. The evolution of Therizinosaurus Cheloniformis and its kin represents a fascinating example of convergent evolution, where unrelated species develop similar traits in response to similar ecological pressures. While the ancestors of therizinosaurs were carnivorous, these dinosaurs gradually evolved to adopt a herbivorous diet. This shift can be attributed to several factors, such as changes in the environment or the availability of food resources. Adapting to a herbivorous lifestyle required significant changes in the therizinosaurs' anatomy. Their skulls became smaller, with beaks adapted for shearing plants, and their teeth were reduced or lost altogether. Their necks elongated, allowing them to reach vegetation at greater heights, while their potbellied torsos and robust legs were well-suited for supporting the larger gut required for digesting plant matter. Classification was initially challenging due to its distinct combination of characteristics. However, after extensive research, it was placed within the Therizinosauridae family, a group of theropod dinosaurs known for their large size, and elongated necks (Ref 3).