

The Brazilian titan

October 18 2016, by Jon Tennant



The Director of Earth Science Museum Diogenes de Almeida Campos shows the biggest piece of fossil of the *Austroposeidon magnificus* dinosaur's neck.

Sometimes the greatest dinosaur discoveries are just lying waiting to be found in a museum cupboard.

Titanosaurs were some of the most enormous animals to have ever strode the Earth, moving in enormous herds and thundering across the land, devouring any forests in their path. They reached a near-global distribution during their time, even reaching Antarctica and Australia,

and recent discoveries have revealed an amazing species diversity for the group.

In South America, titanosaurs truly reached their zenith in both size and biodiversity. Nonetheless, new species keep becoming known to science through numerous discoveries, both old and new! Recently, yet another new species has been named based on series of fossilised vertebra after being locked away for more than 60 years in a museum basement.

The fossils were actually originally discovered back in 1953 by Brazilian palaeontologist Llewellyn Ivor Price, but remained hidden in storage at the Museum of Earth Sciences in Rio de Janeiro due to the lack of proper tools or finances to study it further.

The [new species](#) is named *Austroposeidon magnificus*, and comes from a place in São Paulo State of southeast Brazil called the Paraná Basin. It hails from right near the end of the Cretaceous, when the truly gigantic dinosaurs were roaming the lands, just before many went extinct. The name, *Austroposeidon*, comes from "Austro" meaning southern, and refers to Poseidon, the Greek god for causing earthquakes, as the beast would have shook the very ground it walked on!

Austroposeidon would have been a pretty magnificent sight to behold, coming in at around 25 metres (about 82 feet) in length when fully grown, placing it way up in the heavyweight category. That's about the same as two buses back to front, and makes it the largest known dinosaur from Brazil! So far..

Kamila Bandeira and colleagues were able to even use 3-D CT scanning to show that, similarly to other titanosaurs, the vertebral bones were pneumatized – possessing numerous internal air pockets. These would have considerably lightened the enormous skeleton, much as we see in modern birds. The researchers went back to the original place of

discovery to try and find more of the animal, but unfortunately the area has been urbanised now, rendering finding the final resting place nigh impossible.

Austroposeidon wouldn't have been alone in its adventures. Other sauropods, albeit much smaller sized ones, are known from the same rocks, including Brasilotitan and Gondwanatitan. Similar to other regions where multiple giant herbivores co-existed, it is likely that these animals had certain very specific feeding styles in order to efficiently maximise the use of limited vegetation resources. The latter two might have fed on plants closer to the ground, while Austraoposeidon towered above them, gracefully grazing from the treetops.

The deserts of South America are revealing new dinosaur species to us at an astonishing rate, and the future of discovery there is truly exciting!

More information: Kamila L. N. Bandeira et al. A New Giant Titanosauria (Dinosauria: Sauropoda) from the Late Cretaceous Bauru Group, Brazil, *PLOS ONE* (2016). [DOI: 10.1371/journal.pone.0163373](https://doi.org/10.1371/journal.pone.0163373)

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