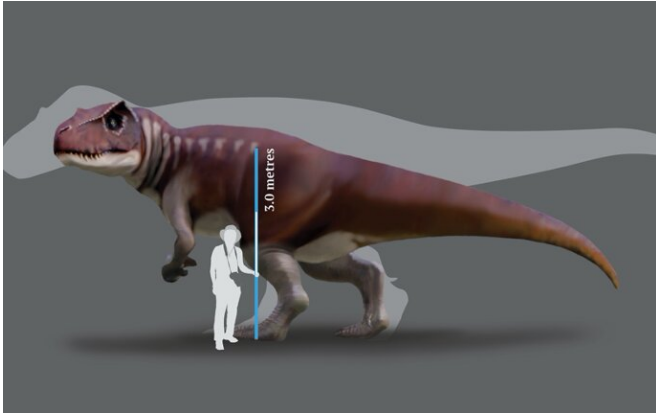


Gigantic Australian carnivorous dinosaurs discovered and studied using footprints

17 June 2020



University of Queensland. Credit: Anthony Romilio

North America had the *T. rex*, South America had the *Giganotosaurus* and Africa the *Spinosaurus*—now evidence shows Australia had gigantic predatory dinosaurs.

The discovery came in University of Queensland research, led by paleontologist Dr. Anthony Romilio, which analyzed southern Queensland dinosaur footprint fossils dated to the latter part of the Jurassic Period, between 165 and 151 million-years-ago.

"I've always wondered, where were Australia's big carnivorous [dinosaurs](#)?" Dr. Romilio said. "But I think we've found them, right here in Queensland. The specimens of these gigantic dinosaurs were not fossilized bones, which are the sorts of things that are typically housed at museums. Rather, we looked at footprints, which—in Australia—are much more abundant."

He explains, "These [tracks](#) were made by dinosaurs walking through the swamp-forests that once occupied much of the landscape of what is now southern Queensland."

Most of the tracks used in the study belong to theropods, the same group of dinosaurs that includes *Australovenator*, *Velociraptor*, and their modern-day descendants, birds.

Dr. Romilio said these were clearly not bird tracks.

"Most of these footprints are around 50 to 60 centimeters in length, with some of the really huge tracks measuring nearly 80 centimeters," he said.

"We estimate these tracks were made by large-bodied carnivorous dinosaurs, some of which were up to three meters high at the hips and probably around 10 meters long. To put that into perspective, *T. rex* got to about 3.25 meters at the hips and attained lengths of 12 to 13 meters long, but it didn't appear until 90 million years after our Queensland giants."

He says, "The Queensland tracks were probably made by giant carnosaurs—the group that includes the *Allosaurus*. At the time, these were probably some of the largest predatory dinosaurs on the planet."

Despite the study providing important new insights into Australia's natural heritage, the fossils are not a recent discovery.

"The tracks have been known for more than half a century," Dr. Romilio said. "They were discovered in the ceilings of underground coal mines from Rosewood near Ipswich, and Oakey just north of Toowoomba, back in the 1950s and 1960s."

Most, he said, hadn't been scientifically described, and were left for decades in museum drawers waiting to be re-discovered.

"Finding these fossils has been our way of tracking down the creatures from Australia's Jurassic Park."

The research has been published in *Historical*

Biology.

More information: Anthony Romilio et al.
Footprints of large theropod dinosaurs in the
Middle–Upper Jurassic (lower Callovian–lower
Tithonian) Walloon Coal Measures of southern
Queensland, Australia., *Historical Biology* (2020).
[DOI: 10.1080/08912963.2020.1772252](https://doi.org/10.1080/08912963.2020.1772252)

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