

'Herd' of dinosaurs found underground at Lightning Ridge

June 6 2019



Artist's reconstruction of *Fostoria dhimbangunmal*. Credit: James Kuether

Scientists have revealed that fossils from an underground opal mine near Lightning Ridge, outback NSW, include remains from a herd of dinosaurs, among them a new dinosaur species and the world's most complete opalized dinosaur.

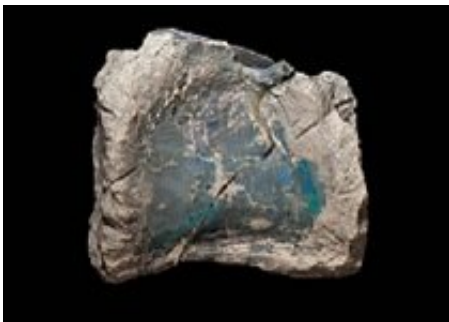
Dr. Phil Bell, lead researcher from the University of New England in

Armidale, said he was stunned by the sheer number of bones found. "We initially assumed it was a single [skeleton](#), but when I started looking at some of the bones, I realized that we had four scapulae (shoulder blades) all from different sized animals." It is the first dinosaur "herd" to be discovered in Australia.

The new dinosaur has been named *Fostoria dhimbanunmal* in honor of [opal](#) miner Robert Foster, who discovered the fossils in the 1980s. The species name, *dhimbanunmal* (pronounced bim-baan goon-mal), means "sheep yard" in the local Yuwaalaraay and Yuwaalayaay languages, in recognition of the Sheepyard locality where the bones were found.

In total, parts of four *Fostoria* skeletons were unearthed, ranging from small juveniles to larger animals that might have been five meters in length, prompting speculation they were part of a small herd or family.

The bones, which are mostly grey potch opal, were found in the 1980s by opal miner Robert Foster at the Sheepyard opal field, near Lightning Ridge. Scientists from the Australian Museum in Sydney helped excavate the fossils, but the bones remained unstudied until donated to the Australian Opal Centre by Robert's children Gregory and Joanne Foster in 2015, under the Federal Government's Cultural Gift Program.



One of the fossil vertebrae of *Fostoria*, spectacularly preserved in opal. Credit: Robert A. Smith, courtesy Australian Opal Centre

Jenni Brammall, paleontologist and special projects officer of the Australian Opal Centre, says, "*Fostoria* has given us the most complete opalized dinosaur skeleton in the world. Partial skeletons of extinct swimming reptiles have been found at other Australian opal fields, but for opalized [dinosaurs](#) we generally have only a single [bone](#) or tooth or in rare instances, a few bones. To recover dozens of bones from the one skeleton is a first."

Fostoria was a two-legged plant-eating iguanodontian dinosaur closely related to the famous *Muttaborrasaurus* from central Queensland, which was discovered in 1980.

The discovery comes on the back of the new small plant-eating dinosaur also from Lightning Ridge, *Weewarrasaurus pobeni*, which was named by Dr. Bell and colleagues late last year.



A toe bone of *Fostoria*, spectacularly preserved in opal. Credit: Robert A. Smith, courtesy Australian Opal Centre

"The rate of discovery is astounding. On average, there's at least one new dinosaur discovered around the world every week," Dr. Bell said. "With more palaeontologists and scientists looking further afield than ever before, it's an exciting time for dinosaur lovers everywhere, especially in Australia."

The new research was published today in the *Journal of Vertebrate Paleontology*.

More information: Phil R. Bell et al. *Fostoria dhimbangunmal*, gen. et sp. nov., a new iguanodontian (Dinosauria, Ornithopoda) from the mid-Cretaceous of Lightning Ridge, New South Wales, Australia, *Journal of Vertebrate Paleontology* (2019). [DOI: 10.1080/02724634.2019.1564757](https://doi.org/10.1080/02724634.2019.1564757)

Provided by University of New England

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