

Developing Saurolophus dino found at 'Dragon's Tomb'

October 14 2015



Perinatal specimens of *Saurolophus angustirostris* (MPC-D100/764). Bones on the right side of the block show a certain degree of articulation, whereas bones on the left are disarticulated. Credit: Dewaele et al.

Scientists describe a perinatal group of *Saurolophus angustirostris*, a giant hadrosaur dinosaur, all likely from the same nest, found at "Dragon's

Tomb" in Mongolia, according to a study published October 14, 2015 in the open-access journal *PLOS ONE* by Leonard Dewaele from Ghent University and the Royal Belgian Institute of Natural Sciences, Belgium and colleagues.

Discovered in an area called the "Dragon's Tomb," a famous location for finding Late Cretaceous dinosaur fossils in the Gobi Desert, Mongolia, the authors of this study described three or four perinatal [specimens](#) or "babies" and two associated eggshell fragments. The young dinosaurs were likely part of a nest originally located on a river sandbank, and the authors suggest they are likely *Saurolophus angustirostris* (meaning 'lizard crest'), a dinosaur that is known from multiple well-preserved complete skeletons.

The skull length of these *Saurolophus* was around 5% that of the largest known *S. angustirostris* specimens, indicating that these specimens were in the earliest development stages. The perinatal bones already resembled *S. angustirostris* characteristics, including the upwardly directed snout (the premaxillary bones). The specimens did not yet have the characteristic cranial crest at the top of the head and areas of the skull-the cervical neural arches-were not yet fused, which suggest they may be in the earliest stages of the development of *S. angustirostris*.

Leonard Dewaele notes, "The poorly developed crest in *Saurolophus* babies provides evidence of ontogenetic [crest](#) growth within the Saurolophini tribe. The Saurolophini are the only Saurolophinae to bear supra cranial crests as adults."

Scientists can't tell whether the individuals were still in the eggs or had just hatched when they died, but they were apparently already dead and partly decomposed when they were buried by river sediment during the wet summer season. The fossilized eggshell fragments associated with the perinatal individuals closely resemble those found from *S.*

angustirostris relatives in Mongolia, and scientists suggest these specimens may bridge a gap in our knowledge of the development of *S. angustirostris*.

More information: Dewaele L, Tsogtbaatar K, Barsbold R, Garcia G, Stein K, Escuillié F, et al. (2015) Perinatal Specimens of *Saurolophus angustirostris* (Dinosauria: Hadrosauridae), from the Upper Cretaceous of Mongolia. *PLoS ONE* 10(10): e0138806. [DOI: 10.1371/journal.pone.0138806](https://doi.org/10.1371/journal.pone.0138806)

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