

It's hard for paleontologists to find baby dinosaurs, but they found one

By Scientific American, adapted by Newsela staff on 03.27.19

Word Count **606**

Level **830L**

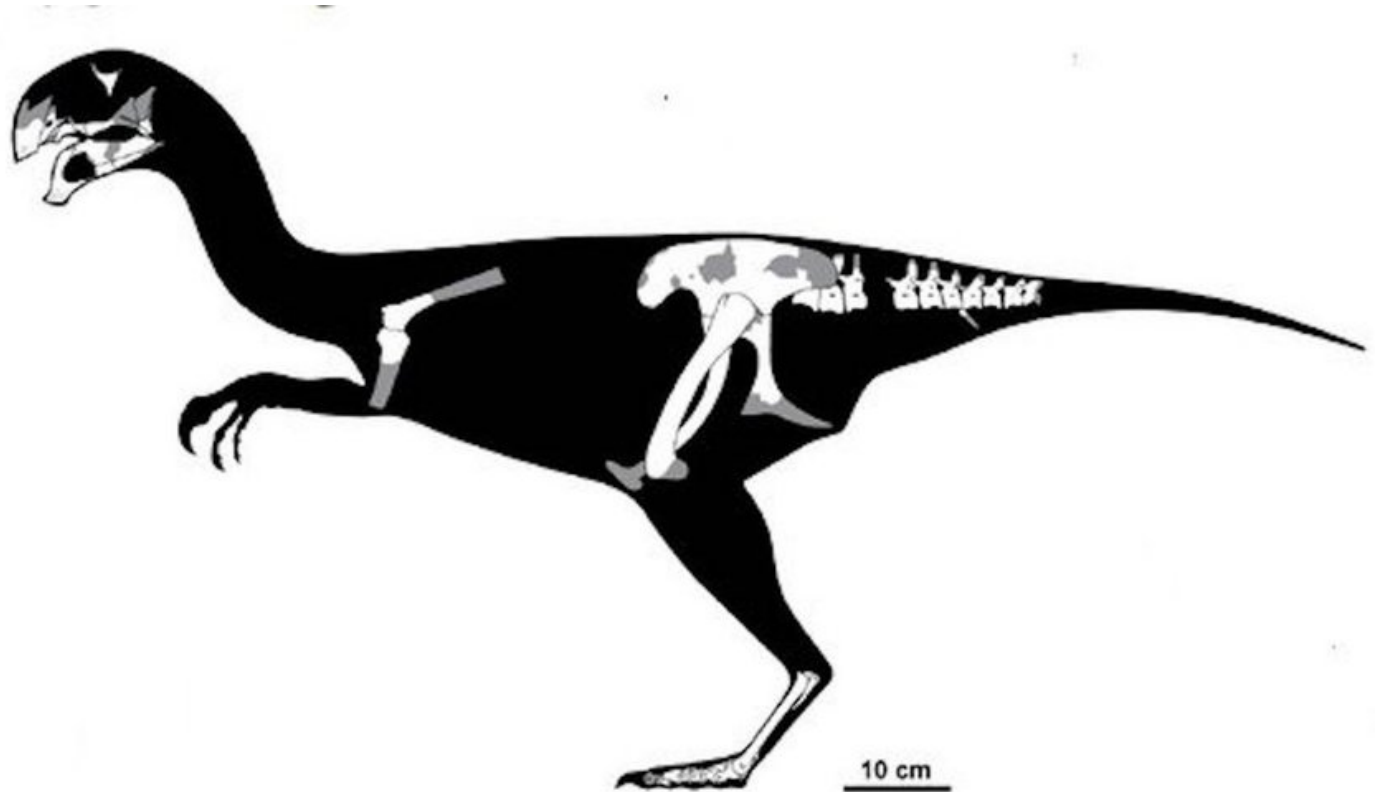


Image 1. A reconstruction of Gobiraptor. Image by: Lee et al/Scientific American

We don't know very much about baby dinosaurs. Looking at just the numbers, this might not seem to make much sense. Non-birdlike dinosaurs laid nests of several eggs. There were far more hatchling dinosaurs than there ever were adults. And yet, when we look at preserved fossils, the babies seem to be invisible. Take Triceratops for example. This famous dinosaur is known from dozens of skulls and specimens. However, what we understand about the first year of this dinosaur's life primarily comes from a single specimen.

Easy Food Source

The answer to the difference is one of subtraction. Studies of dinosaur life show that the first year really was "do or die" for hatchlings. It didn't help that other carnivores and creatures loved to eat baby dinosaurs. The babies were sort of like their fast food, and they ate them as part of their diet.

Then there's the question of all the fossils that have been saved. Paleontologists are scientists who study fossils, the remains of prehistoric animals. For years they have focused on finding big,

awesome, show-stopping specimens. There was not much interest in preserving small dinosaurs. Only recently has the search for pint-sized dinosaurs picked up.

All of that is what makes a new discovery so wonderful. Paleontologist Sungjin Lee and his team found a baby dinosaur. It is a new species and was named *Gobiraptor minutus* by the experts. The bones provide a look at the early life of these strange, bird-like dinosaurs.

Duck-Sized Baby Dinosaur In Mongolia

The fossil was found in southern Mongolia just north of China. The bones include parts of the skull as well as the arms, hips, legs, foot and tail. Having so many bones allowed Lee to come up with a rough drawing of the entire animal. It had a real little foot and was

about the size of a large duck. It had toothless jaws that the dinosaur probably used to crush the shells of insects and other food.



How did the paleontologists know this dinosaur was a baby, though? Maybe it was just a small species. This is an important question, especially since it was named as a new type of dinosaur. The answer, Lee and his co-workers show, is in the femur — or thigh bone — of *Gobiraptor*. They looked at the thigh bone under a microscope, and the structure of the bone showed that it was growing rapidly. Paleontologists use growth rings to estimate how many years an individual dinosaur lived. It's sort of like counting tree rings, but for fossilized bones. This latest discovery did not have any of the growth rings. The young dinosaur was probably less than a year old.

What remains to be seen is how *Gobiraptor* grew up. Most dinosaurs uncovered by paleontologists are relatively mature animals. The fossils show what they looked like as adults. The extreme ends of the dinosaur's life — the very young and the old — are rare. We need those bones to see just how much dinosaurs changed as they aged.

The Hunt For Older Specimens

The big picture is that dinosaurs changed greatly between hatching and adulthood. Especially their heads with all the crests and horns. This is why many "dwarf dinosaurs" turned out to be babies of already-known species. To understand how *Gobiraptor* changed, paleontologists need older specimens to compare to the baby bones. It was very lucky to find the fossil of a baby, so we may get the answer soon.