

DINOSAURS: FACT & FICTION

1 You learned about dinosaurs in school. Maybe you have seen them in a **museum**. But how much do you really know about these animals?

Were dinosaurs just big reptiles?

5 For years, scientists thought dinosaurs were big, dumb,¹ and cold-blooded—in other words, just **giant** reptiles. Some dinosaurs *were* huge. But many were about the size of modern-day birds or dogs. Were dinosaurs warm- or cold-blooded? Paleontologists are not sure. But they believe
10 some were intelligent. Of course, no dinosaur was as smart as a human or even a monkey. However, some smaller dinosaurs—like the two-meter (six-foot) *Troodon*—had fairly large brains.

Was *Tyrannosaurus rex* a powerful predator?

15 Some scientists think the **opposite** is true. In the movies, *T. rex* is often a **speedy** giant, but in fact, this dinosaur could not run very fast. **Physically**, it was too large. **In reality**, *T. rex* probably moved as fast as an elephant. Also, *T. rex* had very small arms. Without strong legs
20 or arms, this dinosaur probably wasn't a powerful **hunter**. It may have been a scavenger instead, only eating animals that were already dead.

Did an asteroid kill the dinosaurs?

25 An asteroid hit Mexico's Yucatán Peninsula about 65 million years ago. It created a 180-kilometer (110-mile) wide crater called *Chicxulub*. Many believe this asteroid caused the extinction of the dinosaurs. But even before this, dinosaurs were already dying out² around the world, for many reasons. At the end of the Cretaceous period, for example, the global **climate**
30 was changing: the Earth's temperature was getting colder.

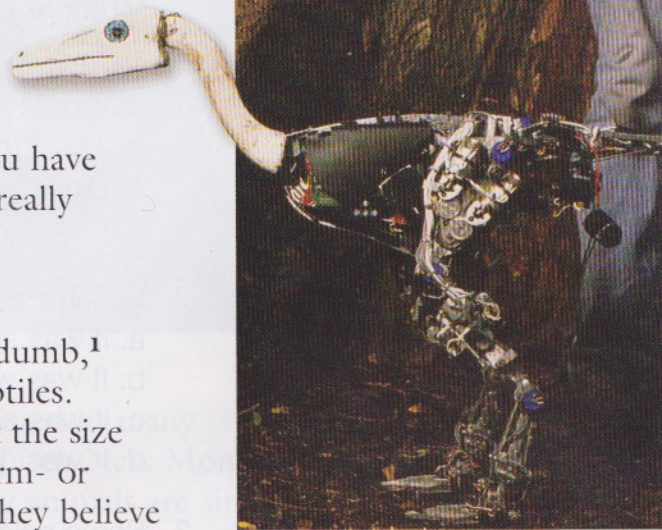
Are all dinosaurs now extinct?²

Dinosaurs **completely** disappeared about 65 million years ago. However, scientists believe modern-day birds are descendants³ of certain dinosaurs. If this is true, then dinosaurs' **relatives**
35 are still walking—and flying—among us!

¹ If something is **dumb**, it is not smart.

² If something **dies out** or becomes **extinct**, it becomes less common and finally disappears.

³ Your **descendants** are people in later generations who are related to you.



▲ A scientist with a mechanical *Troodon*

▼ *Tyrannosaurus rex*



▲ A crater caused by an asteroid hitting the Earth in Australia

MYSTERY OF THE TERRIBLE HAND

Did You Know?

Today, China and Argentina are “hot spots” for important dinosaur discoveries.

Name: *Deinocheirus*

Lived when: 70 million years ago

Discovered where: Mongolia

Whose arms are these? Paleontologists have **sought** an answer to this question for almost forty years. In the 1960s, paleontologists unearthed a pair of giant arms in Mongolia. The **length** of each, when fully **extended**, was 2.4 meters (eight feet). The claws were 26 centimeters (ten inches) long. Paleontologists called the animal *Deinocheirus* (meaning “**terrible** hand”).

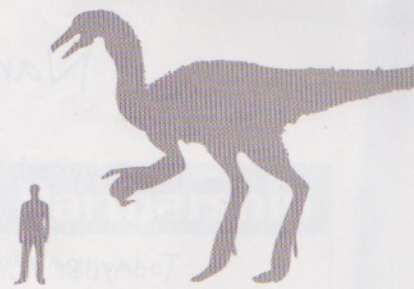
So what did this animal look like? Paleontologists aren’t sure. Many times, scientists have **examined** the area where they found the arms. But since the original discovery, they have unearthed only a few other bones of this dinosaur.

Despite this, scientists have some ideas about *Deinocheirus’s* **appearance**. Physically, this animal’s arms and hands are similar to *ornithomimids*—a type of dinosaur that looked like a modern-day ostrich¹ and used its arms for catching food. But when paleontologists use the size of *Deinocheirus’s* arms to try to **estimate** the size of its body, it seems to have been a huge animal—almost 12 meters (40 feet) long. This is almost as big as a *T. rex*!

Other scientists have a different **opinion**. They think *Deinocheirus* was a smaller dinosaur with extremely long arms. But why would a little animal need limbs² so long? To climb trees or to hunt for food, perhaps? “The body is a **mystery**,” says Thomas Holtz, a paleontologist at the University of Maryland in the U.S. “It might not be an ornithomimid at all. But then what is it?” Until paleontologists find new fossil evidence, this question remains **unanswered**.



▲ *Deinocheirus*: the body is a mystery.



▲ Was *Deinocheirus* a huge animal?

¹ An **ostrich** is a very large bird that cannot fly.

² Your **limbs** are your arms and legs.