



GIANTS OF THE MESOZOIC

EXHIBITION GUIDE

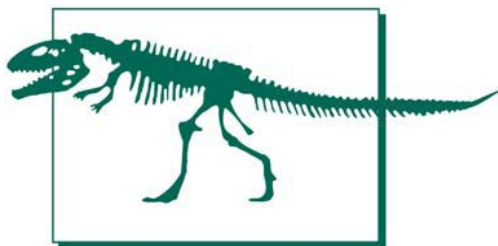
STEP BACK IN TIME
over 90 million years to the
South American country of
Argentina and get a glimpse
of life in the Mesozoic Era.
The world's largest dinosaur,

Argentinosaurus, is defending itself from Giganotosaurus, the world's largest meat-eating dinosaur and a ferocious hunter. Surveying the scene from above are three Anhanguera, flying reptiles otherwise known as pterosaurs. A flock of smaller pterosaurs called Pterodaustro is flying away, having been disturbed by the scuffle between the giant dinosaurs. Based on rigorous research and data, this exhibition highlights both the scientific and creative aspects of paleontology that make it such a unique endeavor.

GIGANOTOSAURUS

(gee-ga-NOH-toh-SAWR-us)

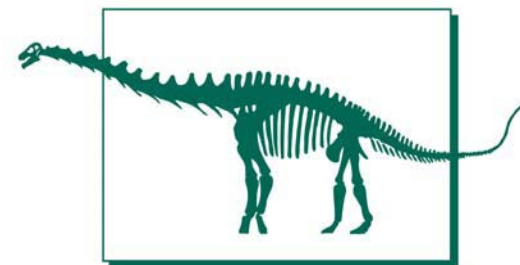
- ☒ MEANING: "Giant Southern Lizard"
- ☒ FAMILY: *Giganotosaurus* is a **theropod** and is thought to be a member of the allosauroid family.
- ☒ SIZE: *Giganotosaurus* measured **45-47 feet long**, 12 feet tall and weighed more than **8 tons**. It is the **biggest two-legged creature** ever unearthed and the **largest carnivore** to date.
- ☒ DIET: *Giganotosaurus* was a meat eater. Its **six-foot, scissor-shaped** skull contained pointed, serrated teeth that were used to slash flesh rather than crush bone.
- ☒ FOSSIL SITE: Neuquén Province of Patagonia, Argentina
- ☒ EXCAVATION: 70% of the skeleton was excavated by paleontologists R. Coria and L. Salgado, who named it a new genus of dinosaur in 1993.
- ☒ TIME PERIOD: *Giganotosaurus* lived 95 million years ago, during the **Cretaceous Period** (145-65 million years ago).



ARGENTINOSAURUS

(ar-gin-TEEN-oh-SAWR-us)

- ☒ MEANING: "Argentine Lizard"
- ☒ FAMILY: *Argentinosaurus* is a **sauropod** and is thought to be a member of the titanosaur family.
- ☒ SIZE: *Argentinosaurus* is the **largest dinosaur** that has ever been described. This specimen is **123 feet long** and would have **weighed over 100 tons**.
- ☒ DIET: *Argentinosaurus* was a **plant eater** that probably feasted primarily on conifers.
- ☒ FOSSIL SITE: Neuquén Province of Patagonia, Argentina
- ☒ EXCAVATION: Excavation began in 1989 and, as is the case with most sauropods, only a partial skeleton was found. Dr. J. Bonaparte and R. Coria named it a new genus of dinosaur in 1993.
- ☒ TIME PERIOD: *Argentinosaurus* lived 90 million years ago, during the **Cretaceous Period** (145-65 million years ago).



FUN FAQs

Did *Argentinosaurus* have toes on its front feet?

Paleontologists have evidence that titanosaurs, like *Argentinosaurus*, did not have toe bones on their front feet. Fossil footprints of titanosaurs do not show toe impressions. Also, the bones of the front feet are rounded at the ends, which is not the shape they would have been if toe bones were attached.

Are all of the bones "real"?

All of the fossils on display in ***Giants of the Mesozoic*** are cast replicas of the original specimens. The actual fossilized bones must remain in Argentina by law, where they are considered a national treasure. It is becoming very unusual to see actual fossils mounted in museum displays. Mounting the actual fossilized bones risks damage to irreplaceable specimens because the bones are so fragile. Using casts in a display allows the actual fossils to be stored safely and enables scientists to use the specimens for research.



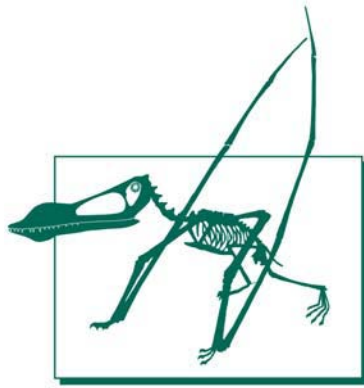
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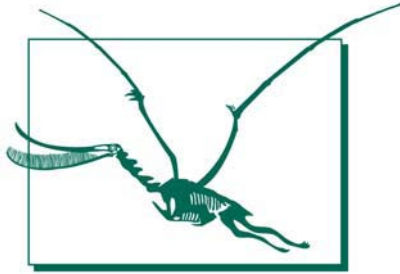
ANHANGUERA (AN-han-GER-a)

- ☒ MEANING: "Old Devil"
- ☒ FAMILY: *Anhanguera* is a **pterosaur**, or flying reptile, and a member of the Anhangueridae family.
- ☒ SIZE: Wingspan of **18-19 feet long**
- ☒ DIET: *Anhanguera* probably consumed fish, perhaps while in flight.
- ☒ FOSSIL SITE: Northeastern Brazil
- ☒ EXCAVATION: Dr. D.A. Campos and Dr. A.W.A. Kellner first described *Anhanguera* as a new pterosaur genus in 1985.
- ☒ TIME PERIOD: *Anhanguera* lived 120 million years ago during the Cretaceous Period (145-65 million years ago).



PTERODAUSTRO (TER-oh-DAS-troh)

- ☒ MEANING: "Wing of the South"
- ☒ FAMILY: *Pterodaustro* is a **pterosaur**, or flying reptile, and a member of the Pterodaustriidae family.
- ☒ SIZE: Wingspan of **52 inches long**
- ☒ DIET: *Pterodaustro* was a filter feeder with **roughly 500 bristle-like teeth** that sifted small organisms out of the water. Short blunt teeth in its upper jaw enabled it to chop its prey into smaller pieces.
- ☒ FOSSIL SITE: San Luis province of Patagonia, Argentina.
- ☒ EXCAVATION: Dr. J. Bonaparte discovered and described *Pterodaustro* in 1970.
- ☒ TIME PERIOD: *Pterodaustro* lived 125 million years ago, during the **Cretaceous Period** (145-65 million years ago).



FOSSILS AND FOOTPRINTS

Additional fossil casts round out the picture of life in prehistoric Patagonia. The simulated rockwork beneath the dinosaurs contains casts of smaller animals, showing the diversity of creatures that inhabited this world. Also look for a fossil from an *Auracaria* tree, and pterosaur and theropod tracks.

ARGENTINA—BIRTHPLACE OF GIANTS

South America is an important destination for paleontologists. Argentina, and especially the region of Patagonia, is home to some of the oldest, biggest and most unique dinosaurs in the world. These discoveries are vital to understanding the 160 million-year history of dinosaurs. No study of natural history is complete without considering the success and eventual decline of these amazing creatures.



DID YOU KNOW?

Giganotosaurus is very different from Tyrannosaurus rex ...

Although these giant meat-eaters look similar, they are actually on different branches of the dinosaur family tree. *T. rex* is more closely related to smaller, speedier meat-eaters like *Velociraptor*. *Giganotosaurus* is more closely related to larger, more primitive meat-eaters like *Allosaurus*.

A side-by-side comparison would show that:

- ☒ ***Giganotosaurus* is approximately four feet longer than *T. rex*.**
- ☒ ***Giganotosaurus* has three "fingers," while *T. rex* has only two "fingers."**
- ☒ ***Giganotosaurus* has a six-foot skull compared with the five-foot skull of *T. rex*.**
- ☒ ***Giganotosaurus* has narrow, blade-like teeth, while *T. rex* has blunt, cone-shaped teeth.**

Giants of the Mesozoic is a collaborative project among Fernbank Museum of Natural History; the Museo Carmen Funes in Plaza Huincul, Argentina; the municipality of Plaza Huincul; the government of Neuquén Province, Argentina; Hall Train Studios; and Dinosaur Productions, Inc.

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