

PARQUE de las CIENCIAS

ANDALUCÍA - GRANADA

TYRANNOSAURUS rex

hunter or scavenger?

www.t-rexgranada.com



T. REX. The killer question

October 2011 • September 2012

**Media Relations
and Tourism**

comunicacion@parqueciencias.com

Parque de las Ciencias Consortium



Collaborates:



Organised by



Consorcio Parque de las Ciencias

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Consejería de Medio Ambiente
Consejería de Economía, Innovación y Ciencia
Ayuntamiento de Granada
Diputación Provincial de Granada
Consejo Superior de Investigaciones Científicas
Ministerio de Ciencia e Innovación
Universidad de Granada
Fundación Caja Rural de Granada
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Parque de las Ciencias and Natural History Museum, London

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Partners

Museo de Ciencias de Castilla-La Mancha. Cuenca
Fundación Conjunto Paleontológico de Teruel-Dinópolis
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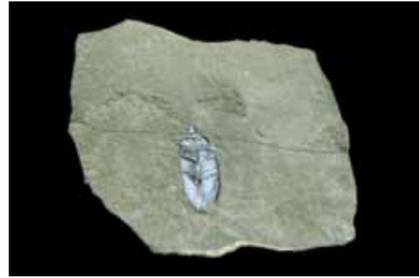


Concavenator corcovatus. Iberian Peninsula

We are constantly discovering new fossils which change our view of what the world was like in prehistoric times. Palaeontologists, like “scientific detectives”, analyse the clues that these fossils give us, coming up with theories and drawing conclusions about how the animals evolved, what they looked like when they were alive, how they behaved and the relationships they had with each other. Each new fossil discovered can lead to new questions and scientists try to find the answers.

This exhibition is based on one such question: was *Tyrannosaurus rex* a hunter or a scavenger? During their visit, visitors will find all the tools and information they need to find out who *T. rex* was. They can discuss the mystery surrounding this creature, which lived on our planet 67 million years ago, and discover its identity.

To answer this question, we’ll need lots of data from field work and laboratory studies. We’ll have to look at the evidence and see what it tells us.



Coleóptera indet. Insect from the Lower Cretaceous period



Sauropod eggs



Teleostei indet. Bony fish from the Lower Cretaceous period

What was the Earth like when *Tyrannosaurus rex* lived here?

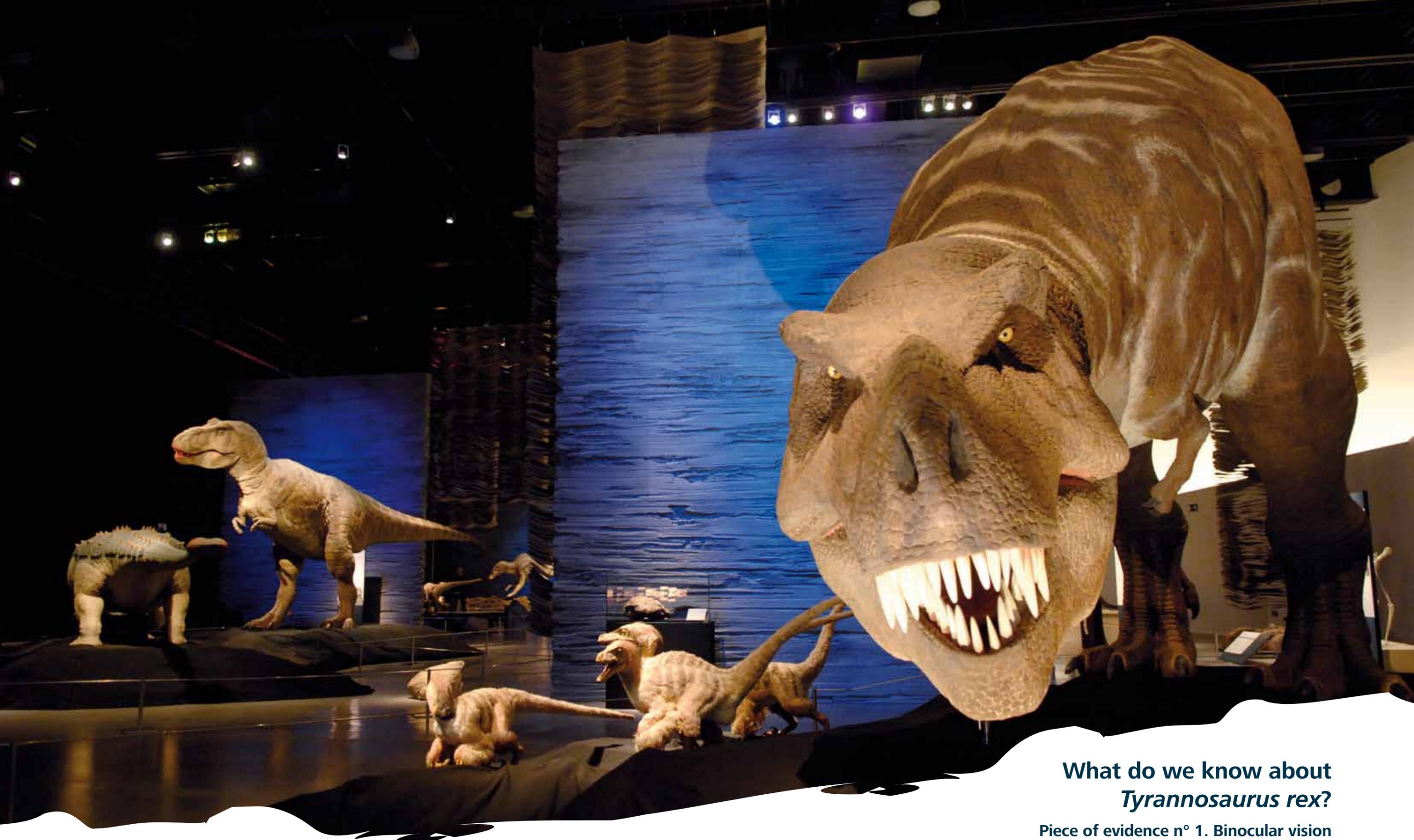
Everything we know about that time is through fossil remains. *Tyrannosaurus rex* lived at the end of the Cretaceous period, in the Mesozoic era, 65 million years ago. By that time, the great supercontinent Pangaea had already split into two smaller continents: Laurasia to the north and Gondwana to the south. These two continents moved further and further away from each other, splitting into other, smaller continents until, at the end of the Cretaceous period, the planet looked very similar to how it looks today. During that geological period, when the climate was warm and seasons began to develop, an enormous environmental change took place which allowed other organisms such as insects to diversify: flowering plants began to grow.

Tyrannosaurus lived alongside other dinosaur species like *Tenontosaurus*, *Ankylosaurus*, *Triceratops*, *Saurornitholestes*, *Deinonychus*, *Edmontosaurus* and *Dromaeosaurus*. Some of them were large and heavy whilst others were small, about the size of a pheasant. Some were carnivores and lived alone, whilst others were herbivores and lived in herds. Some had dry, scaly skin, and others were covered in feathers. But it wasn't just dinosaurs: the planet was also home to a whole host of other organisms like fish, amphibians, turtles, insects, ferns, conifers and mammals.

In the Iberian Peninsula, some really important palaeontological discoveries have been made, ranging from complete skeletons to bones, teeth, footprints, feathers, skin and nests filled with eggs. All of these findings can help us to understand how dinosaurs evolved. Recently, a really important *Concavenator corcovatus* specimen was discovered.



Sabalites leaf



Tyrannosaurus rex alongside several Saurornitholestes specimens

What do we know about *Tyrannosaurus rex*?

Piece of evidence nº 1. Binocular vision

Tyrannosaurus rex's eye sockets both faced forward, providing overlapping fields of vision which helped it to gauge distance. Predators have this type of binocular vision so that they can spy on their prey, but scavengers also need good eyesight so that they can find food.



Tyrannosaurus rex eating a Triceratops carcass

Piece of evidence nº 2. Highly developed sense of smell

T. rex fossils tell us that these dinosaurs had an incredible sense of smell. Scavengers have a good sense of smell so that they can catch the whiff of decomposing meat, but predators need a good sense of smell too so that they can find their prey.



Tyrannosaurus rex chasing an Ankylosaurus

Piece of evidence nº 3. Very strong jaw

Fossil evidence tells us that *Tyrannosaurus rex* had a more powerful bite than any other known dinosaur. A powerful jaw is useful for both scavengers and predators alike: scavengers use them to break bones to get at the nutrient-rich marrow within, and predators can use a powerful bite to kill their prey.

Piece of evidence n° 4.
Short, weak front arms

Tyrannosaurus rex's arms were too short. This meant that they weren't strong enough to hold on to prey.



Piece of evidence n° 5.
Femur longer than the tibia

The femur of an adult *Tyrannosaurus rex* is about 15 cm longer than its tibia. This is good for walking, but not for running.



Fact Sheet

Production:

Parque de las Ciencias. Granada
Natural History Museum. London
Kokoro. Japan

Collaborators:

- Museo de Ciencias de Castilla-La Mancha. Cuenca
- Fundación Conjunto Paleontológico de Teruel-Dinópolis
- Institut Català de Paleontologia Miquel Crusafont, Sabadell. Barcelona
- Museo de Dinosaurios de Salas de los Infantes. Burgos
- IMGEMA. Jardín Botánico de Córdoba
- Centro Paleontológico de Enciso. La Rioja
- Mediateca Científica del Museo Nacional de Ciencias Naturales (CSIC)
- Universidad de Granada

Technical Details:

Leonardo Da Vinci Temporary Exhibition Hall:
2,000 m²
Bilingual: Spanish and English
Advanced animatronics
Contemporary exhibits
Suitable for all ages
Fully accessible
Exclusive website: www.t-rexgranada.com

Exhibition dates:

From the 28th of October 2011 to the 16th of September 2012

Exhibits:

- *Tyrannosaurus rex*. Full size replica skeleton
- *Tyrannosaurus rex* the predator. *T. rex* chasing an *Ankylosaurus*
- *Tyrannosaurus rex* the scavenger. *T. rex* eating a *Triceratops* carcass
- *Tyrannosaurus rex*, *Sauornitholestes*, *Triceratops* and *Herrerasaurus* skeletons
- *Sauornitholestes*. Full size replica skeletons
- Hunting for *Tenontosaurus*. *Deinonychus* hunting and eating *Tenontosaurus*
- *Dromeosaurus* attack. Two *Dromeosaurus* attacking an *Edmontosaurus* nest
- 200 fossils and replica fossils
- Audiovisual exhibits
- Interactive exhibits
- Database
- Palaeontological dig site
- Teaching workshop
- *Find out more* information point



You can't miss it...

YOU'LL HAVE THE CHANCE TO TOUCH
A T-REX'S JAW, FEMUR AND TIBIA.
DON'T FORGET TO TAKE PHOTOS!



YOU'LL DISCOVER A
PALAENTOLOGICAL DIG

YOU'LL GET TO SEE ANIMATRONICS
MORE THAN 12 METRES LONG

YOU CAN TELL US WHAT YOU THINK
ABOUT THE BIG QUESTION: WAS
T.REX A HUNTER OR A SCAVENGER?

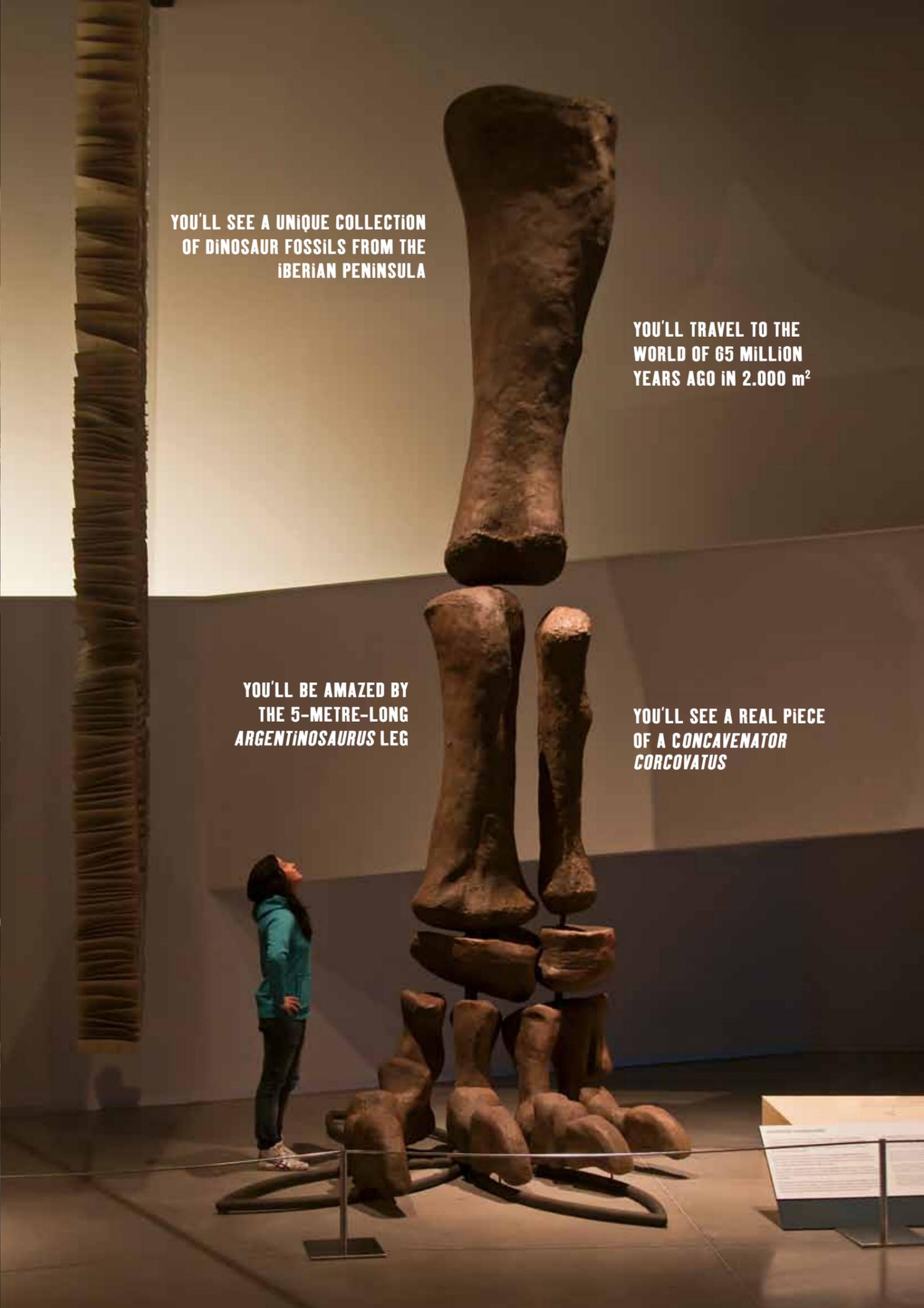


YOU'LL SEE A UNIQUE COLLECTION
OF DINOSAUR FOSSILS FROM THE
IBERIAN PENINSULA

YOU'LL TRAVEL TO THE
WORLD OF 65 MILLION
YEARS AGO IN 2.000 m²

YOU'LL BE AMAZED BY
THE 5-METRE-LONG
ARGENTINOSAURUS LEG

YOU'LL SEE A REAL PIECE
OF A CONCAVENATOR
CORCOVATUS





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