

Look inside!

DARWIN & DINOSAURS



Darwin & Dinosaurs

In 1859, Darwin published *On the Origin of Species*, in which he argued that all life forms are related through common descent and that different species emerged (and continue to emerge) as a result of natural selection.

It is widely considered to be one of the most important books in science.

But he didn't dream it up one day walking in the park. It was the result of what he saw on a five year voyage around the world, studying the plants and animals of South America, the Galápagos Islands, and Australia, followed by years of research and experimentation.

And his perspective and conclusions were only possible in light of then-recent geological and paleontological discoveries.

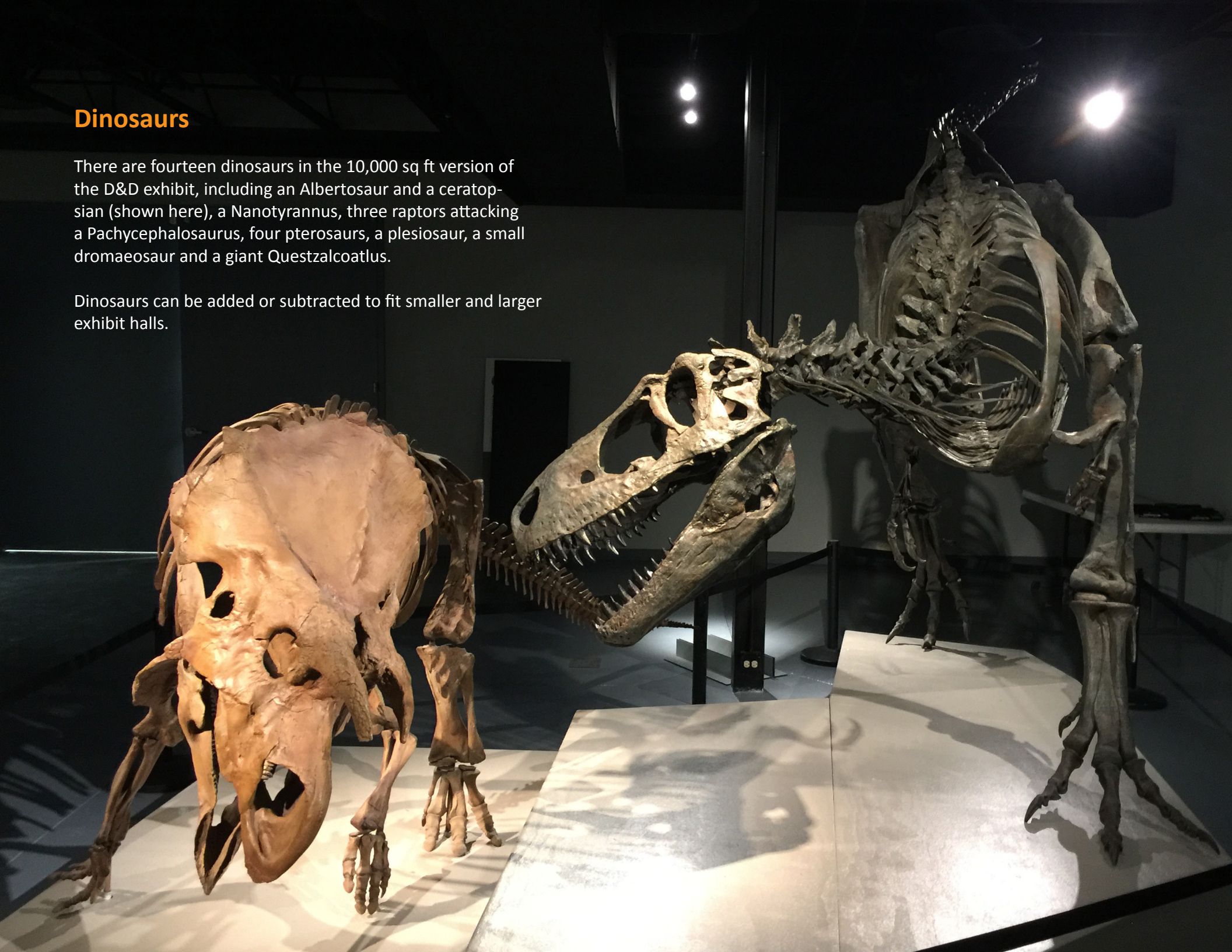
Darwin & Dinosaurs is a story-based, interactive exhibit that sets the stage before Darwin's famous voyage, follows him around the world as he finds clues indicating life evolves, and concludes with modern discoveries that have proved him right.

Fascinating, engaging and, most importantly, educational, D&D lets visitors see the world as Darwin saw it.

Dinosaurs

There are fourteen dinosaurs in the 10,000 sq ft version of the D&D exhibit, including an Albertosaurus and a ceratopsian (shown here), a Nanotyrannus, three raptors attacking a Pachycephalosaurus, four pterosaurs, a plesiosaur, a small dromaeosaur and a giant Quetzalcoatlus.

Dinosaurs can be added or subtracted to fit smaller and larger exhibit halls.



Teach your children well

D&D's dinosaurs are fascinating in their own right, but they also play a key role in telling the story of life on Earth.

There are lesson plans (aligned to Next Generation Science Standards), based on D&D dinosaurs, for both high school and middle school students.





Artifacts

Darwin letters, scientific instruments, a model of HMS Beagle, and first editions of works by Darwin, Wallace and others, provide context and frame the early nineteenth century world.

Eighteen display cases house eighty rare artifacts, including a first edition *On the Origin of Species*.

Friday Nov. 20
(1840)

been prevented by
illness from
acknowledging

I have now
sorry to say to make you
many apologies for being
given you much trouble
in vain for I find



Simple, clear examples illustrate the basic concepts of natural selection.

TRACK OF H.M.S. BEAGLE IN SOUTH AMERICA. DARWIN MADE OBSERVATIONS WHILE TRAVELLING AROUND THE GULF OF THE ATLANTIC, LEARNING THE DEEP IMPRESSION ON THE RIM. IT WAS IN SOUTH AMERICA THAT DARWIN DISCOVERED THE BONES OF EXTINCT ANIMALS, LEARNED ABOUT THE GALAPAGOS ISLANDS, THE VOLCANIC EFFECTS OF THE GALAPAGOS ISLANDS, AND THE VOLCANIC EFFECTS OF THE GALAPAGOS ISLANDS.

Turtles

Galapagos Islands

Volcano & Earthquake

Fossils

Lima

Arequipa

Rio de Janeiro

Bahia

Montevideo

Concepcion

Valparaiso

Bahia Blanca

Falklands

DARWIN'S DISCOVERIES IN SOUTH AMERICA

Saddle-shaped

This saddle-shaped termite is found on the forest understorey around the Equator.

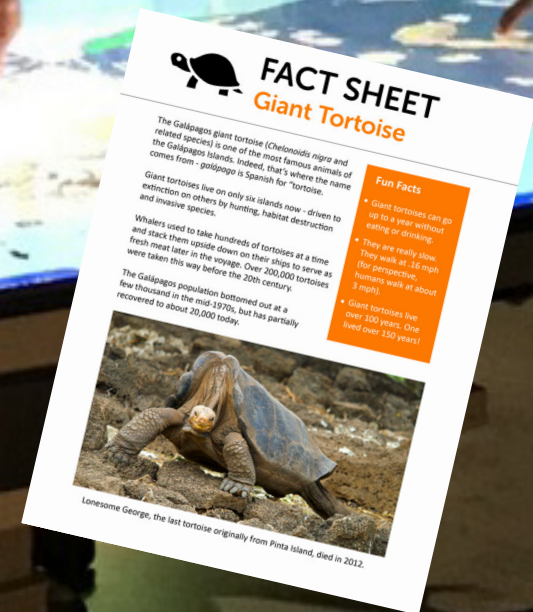
Not only is their antennae (jaws) shaped in a way that allows them reach to wider heights, but they also have longer third tibiae than other termites to assist in climbing.

Longshore George, The last of the sub-species on this island, died in 2012. The termite has a restricted life span.

Galápagos Islands

The Galápagos Table is a giant 70" touchscreen table that let's visitors explore the wildlife and geology of the islands and follow Darwin as he comes across evidence for evolution.

With videos, maps, timelines, images, fact sheets (available online for teachers), quizzes and more, the Galápagos Table is a gold mine of information and can support up to eight people simultaneously.





Hungry Birds

Hungry Birds is a game played on a giant touchscreen wall (12' x 7') that demonstrates how natural selection works. Kids play and learn at the same time.

A magnet for kids, it is recommended by the National Science Teachers Association (NSTA).

DARWIN & DINOSAUR
The Ultimate Museum Exhibit

LINE UP HERE



To Play
HUNGRY BIRDS

It's not easy being a bird
You've got to h
and l

Interactives

There are six 55" touchscreens in the exhibit, and each can be operated by visitors using their phones. No download, instantaneous. Visitors just scan a QR code on the screen and their phone becomes a mouse pad that controls the computer. No-touch touchscreens!

D&D also uses edge-to-edge glass touchscreens that can be wiped down quickly and easily with Clorox wipes, and provides touch-free hand sanitizers at all interactives.

Letting visitors explore on their own is important. Although the exhibit follows an overall timeline/narrative, visitors are encouraged to dig into the topics that interest them most through the interactives.

Interactives include: VISTA (on evolution), The Tree of Life, Origin of Birds, and others.

New to D&D in 2021 is an interactive called Viruses. Originally designed to show how natural selection affects even non-living biological agents, it has been modified to explain the latest mRNA vaccines (and why they are safe), explain the COVID Delta variant, and address specific concerns people have about vaccines in general.

Viruses was created under the supervision of Dr. Lynn Enquist of Princeton University, one of the co-authors of the leading higher ed textbook *Principles of Virology*.

Host museums are free to make the Viruses interactive available through their websites as a public service.





Quetzalcoatlus

Named after the Mesoamerican deity Quetzalcoatl (“feathered serpent”), the Quetz stands 16 feet high and its six foot head towers over visitors.

The largest animal to ever fly, with a wingspan of 34 feet, it is larger than a small plane.

A favorite with adults and kids alike, it is hard to believe it flew.

In fact, there is a lesson plan for middle school students built around the Quetz— **Did it Fly?** —in which students examine the evidence both for and against and learn how science works.

D&D features a number of rare and seldom seen prehistoric monsters—Quetz, Nanotyrannus, Pachycephalosaurus, a plesiosaur, and others—making the exhibit a must-see for dinosaur fans.

Integrating dinosaurs into the story of evolution—including the emergence of modern birds from the theropod line—leverages the universal fascination with dinosaurs and engages everyone in the incredible story of life on Earth.

By the end of the exhibit, visitors will have a much better understanding of how all life is related and how new forms emerge, a result of Darwin’s theory of natural selection.

It's a bird! It's a plane! No, It's Quetzalcoatlus!



Quetzalcoatlus

Named after the Mesoamerican deity Quetzalcoatl, (“feathered serpent”) Quetzalcoatlus is the largest animal to ever fly. With a 34m wingspan, it was larger than a small plane.

How well it flew is still a matter of debate, but the latest models indicate it could fly fast, high and far.

Flight has evolved four times in the animal kingdom: insects, pterosaurs, birds and bats (in that order).

Nothing else comes close to the size of Quetzalcoatlus (QTYZ-uh-kah-ah-tus).

Quetzalcoatlus was a pterosaur, a group that went extinct at the same time as the non-avian dinosaurs at the end of the Cretaceous Period, 66 million years ago.

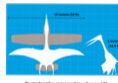


Illustration comparing the wingspan of Quetzalcoatlus to a small airplane.

Pterosaurs are related to dinosaurs and lived at the same time, but birds evolved from a dinosaur line (the theropods), and not from pterosaurs like Quetzalcoatlus.

We know this because birds are more similar to dinosaurs than pterosaurs. For example, although pterosaurs may have had feathers (for insulation or display), they did not have the type of feathers that are used for flight (like birds). Pterosaurs had a leathery membrane (like bats) supported by a highly modified forelimb, that served as the main airfoil.

DARWIN &
DINOSAURS

MARY ANNING

MARY ANNING



Mary Anning (1799 - 1847)

Seashells by the Seashore

Mary Anning was one of the great fossil hunters of all time. She discovered the first ichthyosaur, the first plesiosaur, and the first pterosaur found in England.

Mary and her family would look for fossils along the cliffs near her house where the wind and tides eroded away Jurassic rock, exposing fossils.

By the mid-1820s, Anning was well-known in fossil circles and had helped many leading scientists, including William Buckland, Roderick Murchison, Louis Agassiz, Gideon Mantell, and Richard Owen. Indeed, she was the expert and they were learning from her. She was a careful observer and extremely meticulous and accurate in her descriptions.

In 1826, she opened a shop called Anning's Fossil Depot in Lyme Regis. She was the inspiration for the tongue-twister, "She sells seashells by the seashore."

A Little Help From Her Friends

Mary and her family were very poor. But they had many friends.

In 1830, Henry De la Beche (1796-1855) had a lithograph made of a prehistoric scene he had painted based on her discoveries. He sold copies and gave the money to Mary.

When she lost her life savings in 1835, William Buckland persuaded the British government to grant her a civil pension of £25 per year.



MARY ANNING

The First Pterosaur Found in England

In addition to the first ichthyosaur and the first plesiosaur, Mary Anning also discovered the first pterosaur found in England.

It was a small pterosaur, called *Dimorphodon macronyx* (meaning "two types of teeth with a large claw"). The original specimen is in the Natural History Museum in London.



DARWIN



Artist's conception of a plesiosaur



Ichthyosaur Fossils
This is a reconstruction of a pterosaur from Lyme Regis. It is a small dinosaur, but it has a long neck and a long tail. It is a very rare fossil, and it is very important to study it.



Ammonites
Ammonites are an extinct mollusk. Their shells being smooth and spiral-shaped. They lived in the oceans and usually had a small aperture. The aperture is the opening of the shell. The aperture is the opening of the shell. The aperture is the opening of the shell.



The Annings' First Ichthyosaur

In 1811, eleven-year-old Mary Anning's brother discovered the skull of an ichthyosaur. Some years later, Mary found a larger part of the body. This was the first relatively complete specimen of the animal and it created quite a stir as well when displayed in London.

This was long before modern evolutionary theories had emerged, and most people in England believed in the biblical creation story. The idea of an extinct animal was controversial.

The specimen is now in the Natural History Museum in London. The skull here is a part of the original.

It was dangerous collecting fossils along the cliffs and Mary was often injured. In 1835, Mary wrote to her friend Charlotte Murchison that her painful leg "has been killed when she fell, 'till some time and laid low in a moment before the eye, and close to the feet - it was but a moment between me and the same fate."

Why Darwin & Dinosaurs?

Fixed price. D&D has a fixed monthly rate. There are no additional charges. Not for shipping, not for setup, not for anything. None.

No drama. We usually setup D&D in three days, sometimes four. Never five. Same with strike. We are fast, diligent and professional. We require some help from host staff during setup and strike, but it is minimal.

Proven technology. All of our technology is field tested and we control all computers remotely to trouble shoot problems. Just turn the computers on. That's it.

Great visitor ratings. We think D&D is great, but don't take out word for it. Hundreds of visitors have completed survey cards and the overall rating for D&D is 4.4 out of 5. (A detailed report is available on our website).

K12 Engagement. We hired teachers to create lesson plans based specifically on D&D aligned to the Next Generation Science Standards for both high school and middle school.

D&D is forever. At no charge, we create a 3D model of the exhibit at each museum that hosts D&D. This makes it possible for the local community to "visit" D&D long after it is gone. Incredibly, the interactives work inside the 3D model! It's just like being there. No masks required!

Exhibit Specifications

Size. D&D can flex between 5,000 and 10,000 square feet. All signature elements are included at 5,000 sq ft, a few dinosaurs are not. D&D features eighteen display cases, fourteen complete dinosaurs, six 55" touchscreens, one 70" touch table, and a giant 12' x 7' touch wall.

Ceiling height. A 12 foot ceiling is needed for the exhibit. The Quetzalcoatlus requires 18 feet. Pteranodons are normally hung at 14 feet or higher.


WiFi. The interactives require WiFi for licensing and troubleshooting, but they do not depend on WiFi for content which is loaded on each machine to ensure fast response.

Minimum run. The minimum run is three months and price breaks are offered making six month or longer runs more cost effective.

Pricing. Pricing for Darwin & Dinosaurs is very simple.

- First three months, \$75,000/month
- Next three months, \$50,000/month
- Every month thereafter, \$25,000/month

We are always happy to answer questions!
info@darwindinosaurs.com or 888-600-5054



"Darwin & Dinosaurs is the most educational exhibit we have had at the MOSH in the seven years I have been here."

Maria Hane, Director, Museum of Science & History,
Jacksonville, FL

"Darwin & Dinosaurs was as scientifically sound, educational and interesting as a museum exhibit could get."

Aydin Örstan, Malacologist, Carnegie Museum

"If you're looking for an interactive exhibit with substance, look no further. The response from both kids and adults has been incredibly positive. They rave about the exhibit."

Rod Hansen, Director of Exhibits, Museum of Idaho,
Idaho Falls, ID

Darwin & Dinosaurs is a fun, engaging and educational exhibit where visitors explore, discover and learn.

Darwin & Dinosaurs
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