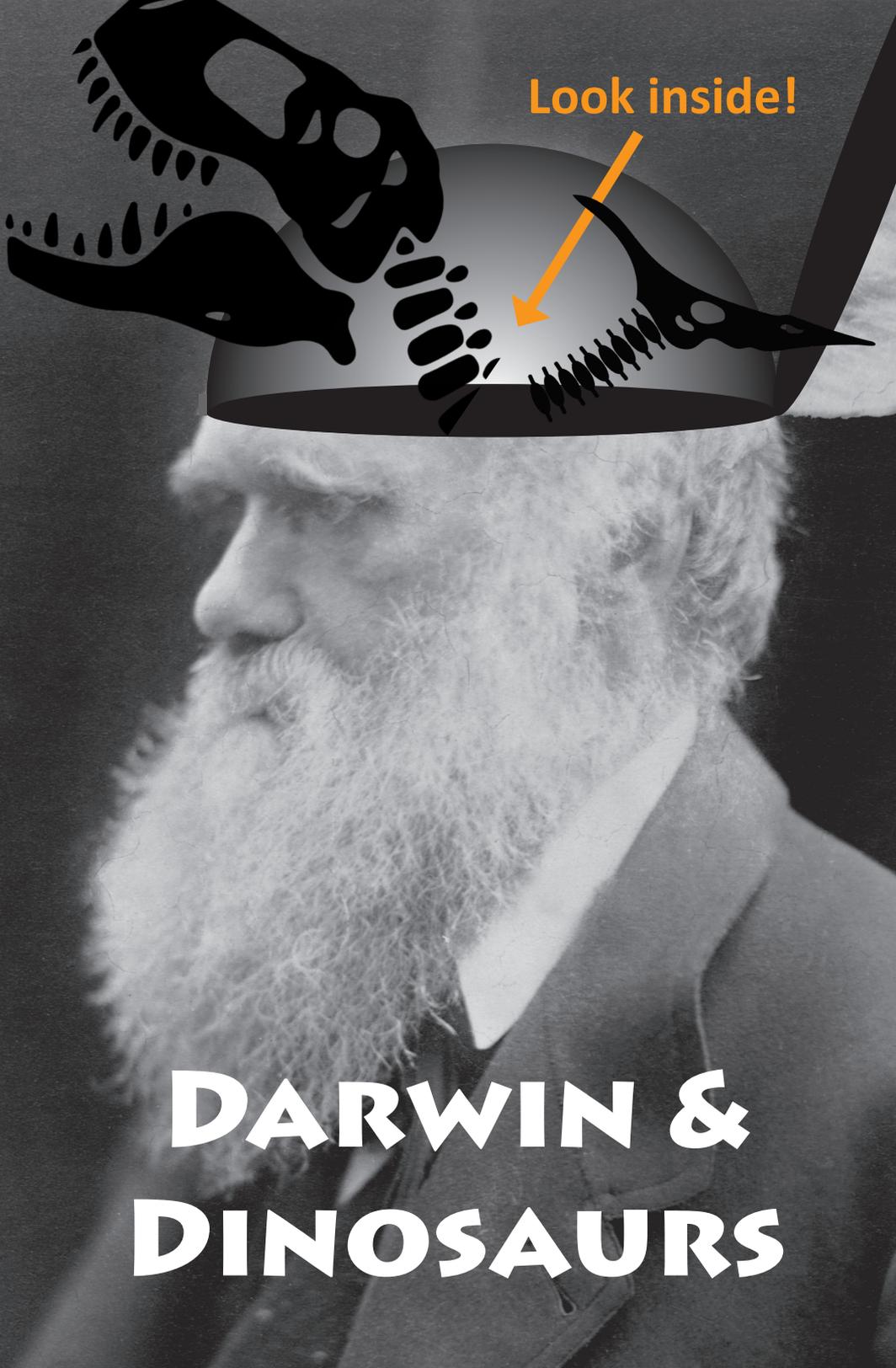


Look inside!



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.

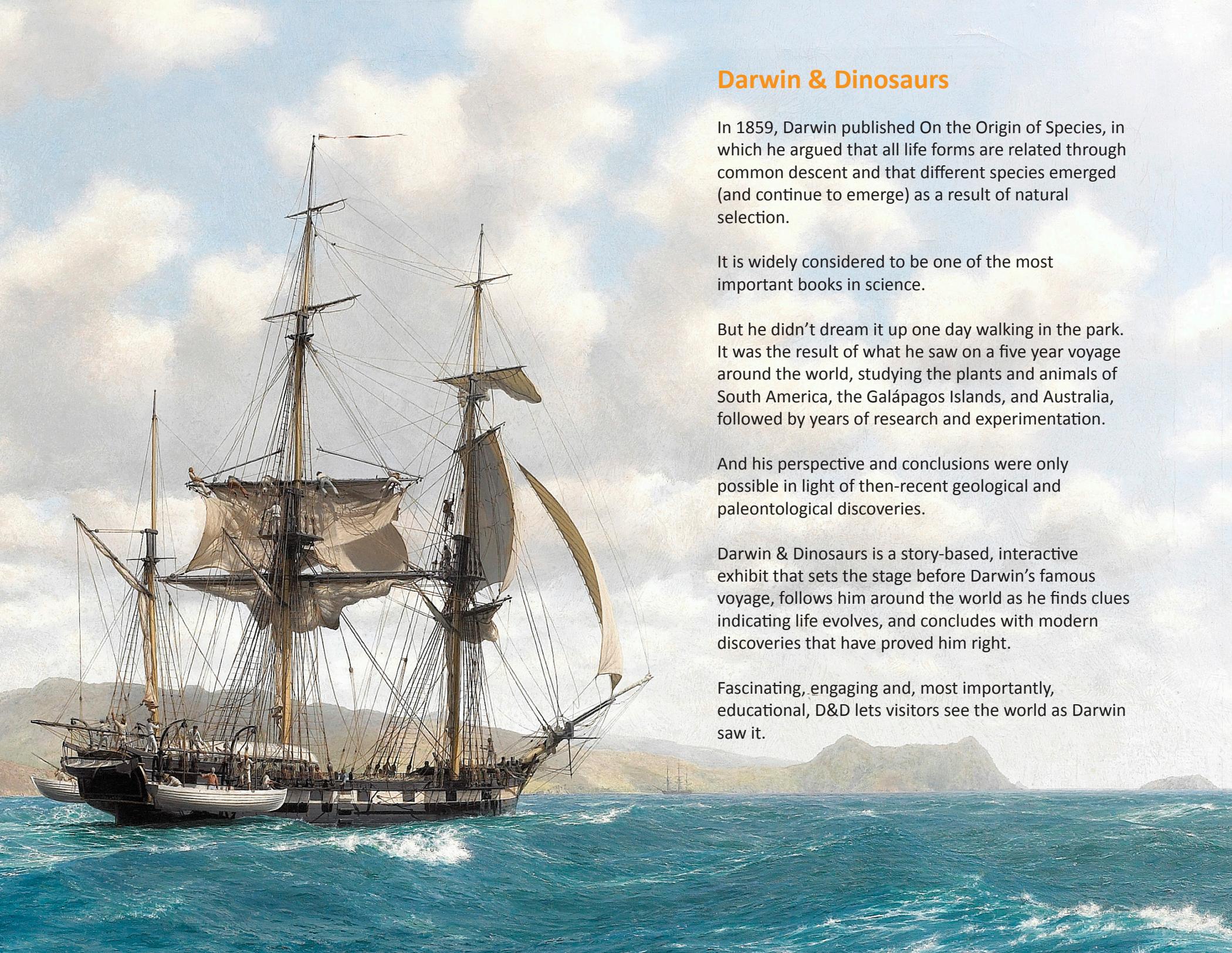
It is widely considered to be one of the most important books in science.

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 Albertosaur 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.



ON THE
ORIGIN
OF
SPECIES
—
DARWIN.



LONDON
JOHN MURRAY

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



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.



FACT SHEET
Giant Tortoise

The Galápagos giant tortoise (*Chelonoidis nigra* and related species) is one of the most famous animals of the Galápagos Islands. Indeed, that's where the name comes from - galápagos is Spanish for "tortoise".

Giant tortoises live on only six islands now - driven to extinction on others by hunting, habitat destruction and invasive species.

Whalers used to take hundreds of tortoises at a time and sack them upside down on their ships to serve as fresh meat litter in the voyages. Over 200,000 tortoises were taken this way before the 20th century.

The Galápagos population bottomed out at a few thousand in the mid-1970s, but has partially recovered to about 20,000 today.

Fun Facts

- Giant tortoises can go up to a year without eating or drinking.
- They are really slow. They walk at 16 mph (for perspective, humans walk at about 3 mph).
- Giant tortoises live over 100 years. One lived over 150 years!



Lonesome George, the last tortoise originally from Santa Fe Island, died in 2012.



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 be
and...

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.





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



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.



Quetzalcoatlus
Named after the Mesoamerican deity Quetzalcoatl, ("feathered serpent") Quetzalcoatlus is the largest animal to ever fly. With a 35m wingspan, it was larger than a small airplane.

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 (NYC at half-size).

Pterosaurs are related to dinosaurs and lived at the same time, but birds evolved from a dinosaur line (the dinosaurs), 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 fourth digit, that served as the main airfoil.

DARWIN & DINOSAURS

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.

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.



Lithograph painted by Henry De la Beche, 1830.

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 macrourus* (meaning "two types of teeth with a large claw"). The original specimen is in the Natural History Museum in London.



Illustration of a pterosaur, called *Dimorphodon macrourus*.



Illustration of a plesiosaur, called *Plesiosaurus*.



Ichthyosaur Fossil
This is a fossilized ichthyosaur, a small marine reptile that lived in the Jurassic period. It was discovered by Mary Anning in 1801.



Ammonites
Ammonites are an extinct group of marine mollusks that lived in the Jurassic and Cretaceous periods. They had a spiral shell and a soft body.



The Anning's First Ichthyosaur
In 1801, Mary Anning discovered the skull of an ichthyosaur. She was 11 years old at the time. This was the first complete specimen of the animal and it caused quite a stir when displayed in London.
This was long before modern evolutionary theories had emerged, and most people in England believed in the biblical interpretation. The idea of an extinct animal was controversial.
The specimen is now in the Natural History Museum in London. The skull here is a cast of the original.
It was dangerous collecting fossils along the coast of Lyme Regis, because the tide would cut off the cliffs and mud slabs.
In 1835, Anning wrote to her friend Charles Murchison that her "dear old boy" had been killed when the "old" had come home and killed him in a moment before the rain, and close to the feet - it was not 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
info@darwindinosaurs.com
888-600-5054