Replica Fossil

Velociraptor claw

Velociraptor is a small carnivorous dinosaur. It was about the size of a turkey. Recently paleontologists have discovered that velociraptor was almost certainly feathered. This is the "killing claw" - the second toe claw, that may have been used to hold struggling prey in a similar way to modern hawks.

Era: 72 mya
Scale: 1/1

Replica Fossil

Deinonychus claw

Deinonychus is a carnivorous dinosaur in the same family as velociraptor (the Dromaeosauridae family). Deinonychus could grow up to 2.5m long and was probably feathered, like velociraptor.

Era: 80 mya
Scale: 1/1

Replica Fossil

Megalodon tooth

Megalodon (meaning giant tooth), is the largest ever shark to have lived. Luckily, it went extinct 2.6mya. Most of what we know about Megalodon comes from teeth like this one. Scientists still disagree on how big Megalodon really was, estimates range from 10-25m long!

Era: 5 mya
Scale: 1/1

Replica Fossil

Nanotyrannus lancensis claw

Nanotyrannus lancensis is a small tyrannosaur. Scientists are not sure if this dinosaur is its own species or a young T. rex

Found: Wyoming USA
Held by: Hanson Research Station
Era: 70 mya
Scale: 1/1

Replica Fossil

Brachiosauridae tooth

This a tooth from a sauropod dinosaur (a group of long necked dinosaurs that includes Brachiosaurus). Sauropods were herbivores and used their long necks to reach the leaves and foliage on trees. They had rake like teeth that could be used to strip leaves from branches.

Found: Mahajanga Basin, Madagascar
Held by: Museo di Storia Naturale di Milano
Era: 170 mya
Scale: 1/1

Replica Fossil

Triceratops tooth

Triceratops was a herbivore that fed on shrubs and ferns. They had very complex teeth that allowed them to them slice up tough plant material as they chewed, allowing them to eat plants that were too tough for other dinosaurs.

Found: Wyoming USA
Held by: Hanson Research Station
Era: 70 mya
Scale: 1/1

Replica Fossil

Trilobite

Trilobites appeared in the ocean around 600 mya, long before fish or dinosaurs. They are one of the earliest animals found to have eyes. They flourished in the seas for over 300 million years. Fossils are quite common as they were widespread, lived in the ocean and had an easily fossilized exoskeleton.

Found: Dudley, England
Held by: Lapworth Museum of Geology
Era: 428 mya
Scale: 1/1

Replica Fossil

Ammonite Subprionocyclus sp.

Ammonites are related to modern cephalopods (like squid, octopus & cuttlefish). They had squid like tentacles extending from their multi chambered shells and a sharp beak like jaws. They probably swam backwards, by squirting water from their shells.

Found: Wyoming USA
Held by: Yale Peabody Museum
Era: 85 mya
Scale: 1/1

Replica Fossil

Ammonite Perisphinctes sp.

Most ammonite species had coiled shells like this one. The shell are divided into chambers separated by thin walls called septa. The animal lived in the outermost chamber and could pump air into the other chambers through a narrow tube called a siphuncle. This probably helped them adjust their buoyancy.

Found: Madagascar
Held by: J. Tünnermann Collection
Era: 155 mya
Scale: 1/1

Replica Fossil

Ammonite Eotetragonites

Ammonites were once one of the most abundant animals in the sea. They went extinct along with the dinosaurs 66 mya. They ranged in size from a few millimeters to almost 2 meters across. They were carnivores, feeding on plankton, crustaceans and other ammonites.

Found: Bee Creek, California
Held by: Raymond M. Alf Museum
Era: 115 mya
Scale: 1/1

Replica Fossil

Australian Theropod footprint

Trace fossils like this footprint help scientists figure out how dinosaurs walked. It sticks up, because it was made by sediment filling up the original footprint before hardening into stone.

Found: Mount Morgan, Queensland, Australia
Era: 195 mya
Scale: 1/1

Replica Fossil

Tiktaalik Roseae

Tiktaalik is an extinct fish, with a flat crocodile-like head and sturdy, boned fins that it could use to pull itself along in the shallows. It has features of both fish and early tetrapods (the first 4 legged animals to live on land), which helps us understand how land animals evolved.

Found: Ellesmere Island, Canada
Held by: Museum of Natural Sciences, Belgium
Era: 375 mya
Scale: 1/6

Replica Fossil

Nanotyrannus lancensis skull

Nanotyrannus lancensis is a small tyrannosaur. Scientists are not sure if this dinosaur is its own species or a young T. rex. means Nanotyrannus means 'pygmy or dwarf tyrant'.

Found: Montana, USA
Held by: Museum National d'Histoire Naturelle
Era: 65 mya
Scale: 1/6

Replica Fossil

Tyrannosaurus tooth

T. rex is among the largest land dwelling predators ever to have existed. Its bite was strong enough to crunch through bone. The largest tooth found was estimated to have been 30cm in length including the root.

Era: 70 mya
Scale: 1/1

Real Fossil

Coprolite (Fossil Poo)

This is a fossilised poo from the era of the dinosaurs. The largest coprolite ever found was around 40 cm long and contained lots of bones, so scientists think it belonged to a large carnivorous (like a T. Rex).

Found: Colorado, USA
Era: 150 mya

Real Fossil

Coprolite (Fossil Poo)

Coprolite is fossilised poo. Coprolites are called "trace fossils" because they tell us about how extinct animals behaved (rather than the structure of their bodies). This one could have been from an ancient tortoise like creature.

Found: Madagascar
Era: 65 mya

Real Fossil

Orthoconic nautiloid

The Orthocone had a long cone shaped shell. The animal lived in the outermost chamber and used its tentacles to drag in other sea creatures and crush them with its powerful beak. It had large primitive eyes.

Found: Morocco
Era: 400 mya

Real Fossil

Tulear Ammonite (polished)

This Ammonite has been polished to show the Suture - the complex patterns formed where the walls of the internal chambers join onto the outer shell. These patterns grew more complex as ammonite species evolved and help scientists identify what period a fossil is from.

Found: Tulear, Madagascar
Era: 160 mya

Real Fossil

Ammonite Perisphinctes

Perisphinctes is an extinct genus of ammonite that were widely distributed all over the world from the middle to late Jurassic. Many ammonites ornamental features like the complex ribbing on the outside of this shell. Scientists are not sure why.

Found: Madagascar
Era: 130 mya

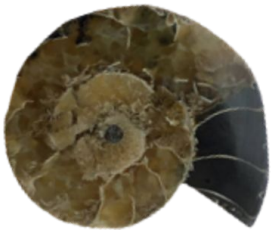
Real Fossil

Goniatite

Goniatites are another group of extinct cephalopods. They came before the Ammonites, appearing in the ocean around 390 mya and going extinct in the Permian-Triassic extinction event (along with 96% of marine species).

Found: Morocco
Era: 345 mya

Real Fossil



Tulear Ammonite (half)

This Ammonite has been polished and cut if half. On one side you can see the internal chambers of the shell (the animal always lived in the outermost one). One the otherside you can see the complex Suture patterns where the internal chamber joins to the outer shell.

Found: Tulear, Madagascar
Era: 160 mya

Real Fossil

Eupatagus

This is an ancient sea urchin. Sea urchins are round spiny animals that feed primarily on algae. They have five-fold symmetry, like starfish and many species still flourish in the ocean today.

Found: Florida, USA
Era: 10 mya

Real Fossil

Ammonite

This Ammonite is still embedded in the rock in which it was fossilized. Can you spot any other creatures in the rock?

Era: 170 mya

Model

Pleuroceras Ammonite

Pleuroceras were small ammonites with a particularly beautifully ribbed shell with a serrated keel running around the outside. The meaning is "ribbed horn" and they were carnivores that lived in marine waters of what is now the UK, Algeria, Austria, France, Germany, Spain and Canada.

Era: 185 mya
Typical Size: 3-6cm
Scale: 1/1

Model

Apatosaurus

Apatosaurus was a large plant eating dinosaur that lived in the late jurassic. Computer modelling suggested they might have been able to crack their whip like tails to make a noise as loud as a cannon firing.

Era: 151 mya
Typical Size: 22m
Scale: 1/50

Model

Archaeopteryx

With its mixture of bird and dinosaur like features, Archaeopteryx has played a key role in our understanding of how birds evolved. It was long viewed as the first bird, although recent finds of earlier species with similar characteristics in China may have knocked it off that perch.

Era: 150 mya
Typical Size: 50cm
Scale: 1/5

Model

Dimetrodon

Dimetrodon lived more than 50 million years before the dinosaurs and was the biggest and fiercest land dwelling predator of its time. The large sail on its back may have been used for courtship displays or possibly to help it regulate its body temperature.

Era: 280 mya
Typical Size: 3m
Scale: 1/15

Model

Postosuchus

Postosuchus was a large carnivore from the late Triassic. It is not a dinosaur - it belongs to an extinct group of animals related to crocodiles. It ate large herbivores and many smaller species, including early dinosaurs. Scientists are still not sure if it walked on 4 legs or 2.

Era: 210 mya
Typical Size: 6m
Scale: 1/30

Model

Velociraptor (Outdated)

Velociraptor is a small carnivore that was about the size of a turkey. Figuring out what dinosaurs looked like takes a lot of guesswork, as we only have what was preserved as fossils. Paleontologists used to think dinosaurs were scaly like modern reptiles (and this model), but recent discoveries have shown that velociraptor (and many other dinosaurs) was actually feathered.

Era: 73 mya
Typical Size: 2m (nose to tail)
Scale: 1/10

Model

Velociraptor

Our understanding of velociraptors has changed as new fossils and techniques for scanning them have been found. Imprints of feathers have been observed on closely related species and in 2007, quill knobs were discovered on a velociraptor fossil, proving they had feathered arms. These feathers would not have let them fly, but they could have helped keep velociraptor warm.

Era: 73 mya
Typical Size: 2m (nose to tail)
Scale: 1/10