

A CREATIONIST'S
WALK THROUGH
THE *EVOLVING*
PLANET EXHIBIT

THE BASICS

In one way or another, all natural history museums use the geologic column as their frame of reference. The Field Museum's *Evolving Planet* takes visitors on a walk through their interpretation of history, beginning with the earth's origin and moving through all the successive fossil layers.

Creationists do a similar thing. We have the same facts as evolutionists—the same fossils and rock layers—but we disagree about the interpretation of their past.

One simple principle will revolutionize how you see these museums. The Flood destroyed different places that existed at the same time and buried them at different levels in the sequence of rock layers that cover the continents. Evolutionists, in contrast, believe each different level represents a different time.

Noah's world was similar in several ways to ours. For example, we don't see the same plants and animals living everywhere. Instead, the globe is covered by dozens of distinct ecological communities, all living at the same time. Even though the climate contrasts were likely smaller before the Flood, it seems that an even greater variety of communities coexisted and is now on display at the natural history museum's "zoo."

Imagine. You can step back in time and witness the variety of creatures that covered the planet during the days of Adam, Noah, and other patriarchs. With preparation, you can march into any of these secular temples and confidently reclaim these testaments to God's glory (Romans 1:20).

For creationists, the geologic column shown in the museum is divided into two parts: "the world that existed then [before the Flood]" and "the earth which is now [after the Flood]" (2 Peter 3:6–7).

The earliest exhibits at the museum—featuring extinct trilobites, pterosaurs, and dinosaurs—represent creatures that were alive when the Flood struck during Noah's day. According to the most widely held creation model, the breakup of "the fountains of the great deep" (Genesis 7:11) unleashed surging waves that tore apart environment after environment, as the water drove inland. The animals and plants living in each environment were destroyed and buried in rapid succession.

That would explain why the fossil record has sea creatures buried first, followed by coastal and inland creatures. And that's how you can explain the museum's exhibits to others.

HELPFUL READING:

- ***Order in the Fossil Record***

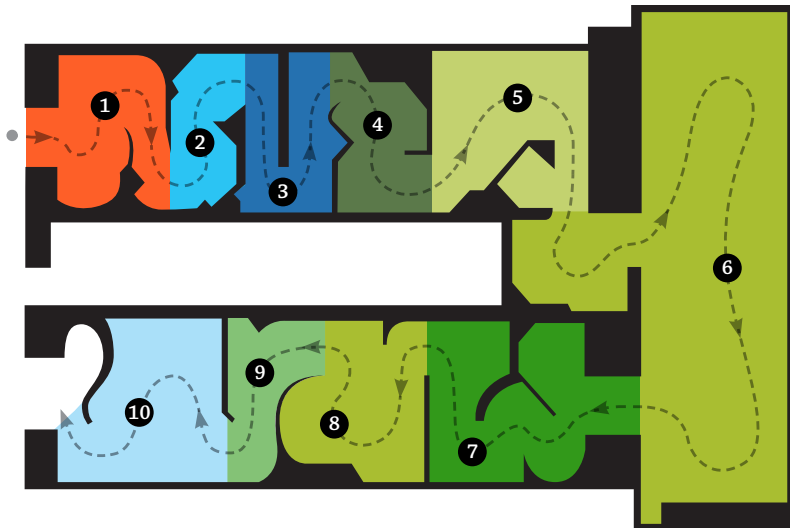
<http://www.answersingenesis.org/articles/am/v5/n1/order-fossil-record>

- ***Stumbling Stones or Stepping Stones—Fossils and Biblical Authority***

<http://www.answersingenesis.org/articles/am/v5/n1/stepping-stones>

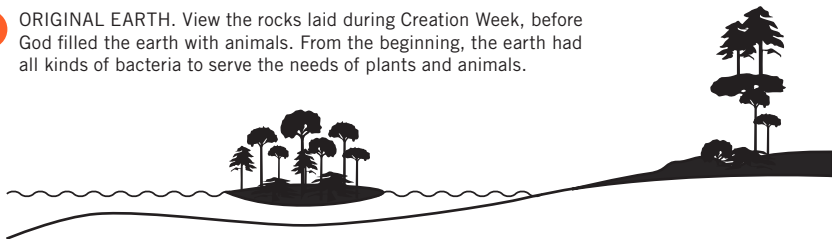
- ***Noah's World—Same Time, Different Place***

<http://www.answersingenesis.org/articles/am/v6/n4/noahs-world>



PRE-FLOOD WORLD

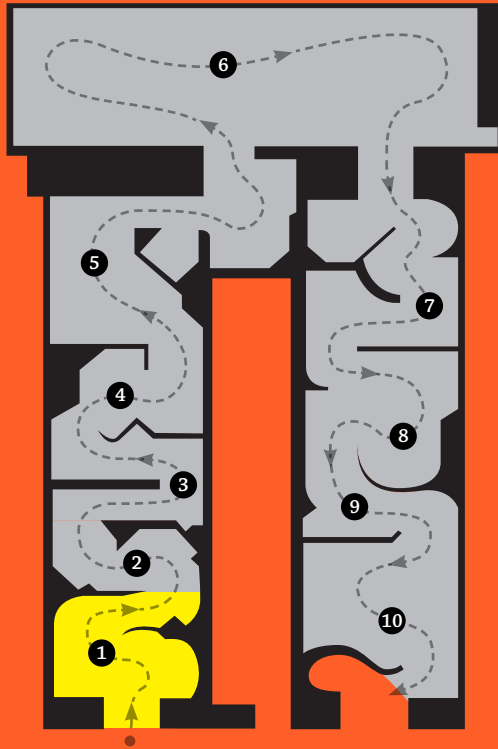
- 1** ORIGINAL EARTH. View the rocks laid during Creation Week, before God filled the earth with animals. From the beginning, the earth had all kinds of bacteria to serve the needs of plants and animals.



- 2** CAMBRIAN SEAS. View the different ocean habitats during Noah's day, filled with strange seafloor creatures like trilobites and fearsome 4-ton armored fish like *Dunkleosteus*.
- 3** SWAMPY "FORESTS." View bizarre hollow plants and amphibian-like animals, such as *Tiktaalik*, which lived among the roots of bog-like mats floating on the pre-Flood ocean.
- 4**
- 5** SANDY COASTS. View a hall full of odd four-legged creatures, such as the 6-foot (2 m) amphibian *Eryops* and the sail-backed *Dimetrodon*, which waddled across the sandy pre-Flood coasts.
- 6** DINOSAUR HALL. View reptiles that lived in the continent's interior. *Allosaurus* and *Stegosaurus* apparently lived in one region (Jurassic), while *Tyrannosaurus* and *Triceratops* lived elsewhere (Cretaceous).

POST-FLOOD WORLD

- 7** POST-FLOOD RECOVERY. View creatures that died in a succession of regional disasters after the Flood. Extinct species of camels, horses, and other mammals look similar to modern species because they descended from the same original "kinds," which God saved on the Ark.
- 8**
- 9** ICE AGE. View giant sloths, mastodons, and other amazing creatures that were well suited to survive the Ice Age, which arose briefly in the aftermath of the Flood.
- 10**



ORIGINAL EARTH (PRECAMBRIAN)

View the rocks laid during Creation Week, before God filled the earth with animals. From the beginning, the earth had all kinds of bacteria to serve the needs of plants and animals.

HELPFUL READING:

- *Thirty Miles of Dirt in a Day*
<http://www.answersingenesis.org/articles/am/v3/n4/thirty-miles-of-dirt>
- *The Matrix—Life's Support System*
<http://www.answersingenesis.org/articles/am/v3/n3/matrix>



IS THERE AN ORDER TO THE FOSSIL RECORD?

In most museums, you'll find an illustration of the fossil record, showing Precambrian fossil layers at the bottom and Cenozoic layers toward the top. According to evolutionary history, these layers represent snapshots of the evolutionary process over millions of years.

However, creationists have a different interpretation. Based on what the Bible says, some creationists expect the fossil record to be divided into two broad categories. One category, a mix of plants and animals, would include many strange creatures from a world that was destroyed by the Flood. Above it would be a familiar mix of plants and animals from the world after the Flood.

But what could explain the progression of layers laid down *during* the Flood (first category mentioned above)?


One possibility is that the order reflects the sequence that the Flood buried different environments, beginning at the ocean floor. Genesis indicates that the Flood began with a violent breakup of the ocean floor. If so, it makes sense that sea creatures were buried before land animals.

Within this model, as the floodwaters rose over the coast, they swept away organisms on the shore, then farther and farther inland, with each new surge destroying another ecosystem. In this way, organisms could be buried based on the geographic and ecological order in which the floodwaters overwhelmed them.

Within this model, the upper portion of the fossil record, which contains a more familiar mix of organisms, is from the world *after* the Flood. Harvard-trained paleontologist Dr. Kurt Wise states:

When the upper portion of the fossil record was first described, it was described by percent of fossils in a given layer that were modern species. At the bottom, few species modern, and then increasing in modern-ness as you go up.

This sequence is consistent with what the Bible says. After the Flood, each kind of organism quickly diversified and spread across the surface of the earth. Many of these creatures appear to have been buried during a series of smaller catastrophes in the unstable world following the Flood.





DIFFERENT TIME PERIODS OR ECOSYSTEMS?

The usual story behind the fossil record is that each layer represents a period in time during which certain animals lived and died. Again, creationists offer a different interpretation of the evidence. The following model, developed by Dr. Kurt Wise, presents one idea about how the fossil layers may have been deposited. (Note: although we use the given names for the various layers of the geologic column, we reject the long timescales associated with those names.)

4004 BC – The **Precambrian** strata represent earth's "basement rocks" that God formed during the initial creation period. The initial continent was distributed as is pictured by the Rodinia concept. Much of this initial continent was covered by shallow seas. Located along the edge of the continent, were hot water reefs. Massive floating forests existed. Further inland were the habitats of the original created kinds of animals and humans.

2349 BC – The Flood begins. The **Paleozoic** invertebrate animals that lived in the shallow seas were among the first to be covered with sediment. The sand dunes along Rodinia's beaches and coastal animals were carried out to sea and redeposited by floodwaters as the **Permo-Triassic** sands of the world.

The **Ediacaran** through **Cretaceous** layers largely represent how the Flood picked off, in sequence, the hot spring reefs (**Vendian/Cambrian** layers), the shallow seas (**Ordovician/Silurian** layers), the floating forest (**Sigillaria/Devonian/Mississippian/Pennsylvanian** layers), and finally the dinosaurs (**Triassic/Jurassic/Cretaceous** layers). Land animals were among the last to be buried.

2300—2000 BC – The **Paleogene** and **Neogene** (*Tertiary* and *Quaternary*) were produced in the first couple centuries following the Flood.

For more information, see K. Wise, "The Hydrothermal Biome: a Pre-Flood Environment," *Proceedings of the Fifth International Conference on Creationism*. Creation Science Fellowship, 2003, pp. 359–370.

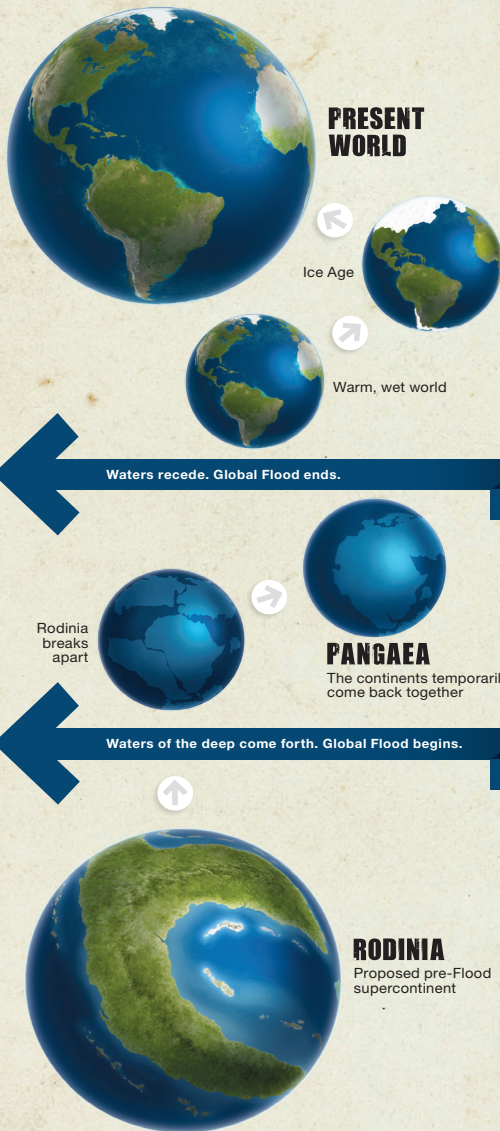
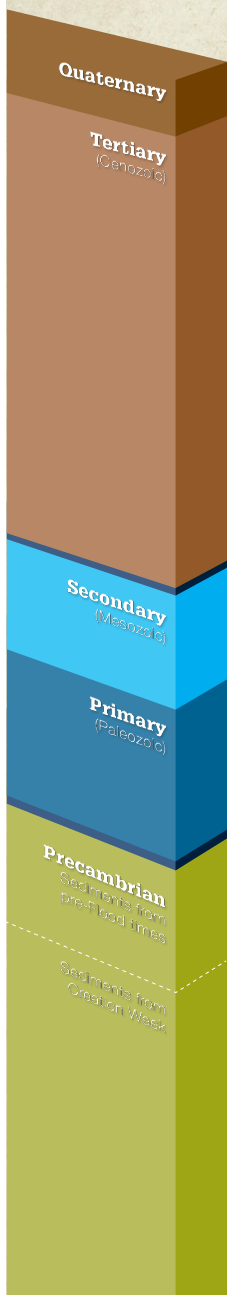
Although there is some disagreement among creationist geologists about the sequence of events given here, most accept this model of fossil layer formation. They agree that, rather than representing time periods separated by millions of years, the rock and fossil layers are more accurately described as buried ecosystems.



THE STONES CRY OUT

The geologic record is not "proof" of sediments deposited slowly over millions of years. It is merely layers of rocks stacked in the order they were formed and deposited, waiting to be interpreted. This order should be interpreted using the biblical framework to designate which rocks came from Creation Week, pre-Flood times, the global Flood, and post-Flood catastrophes.

(Note: The placement of geologic boundaries between biblical events is still under discussion, as creationists continue to sift through the contents of the rock layers.)



How to read the geologic record

Since the geological column is stacked layer upon layer, like shingles on a roof, the rock record must be read from the bottom up.

6 We encounter evidence of a brief Ice Age period, the final transition to the modern era.

5 We find sediments full of fossils formed in catastrophes that decreased in size as the earth's crust stabilized, the climate cooled and dried, and animals and plants refilled the earth.

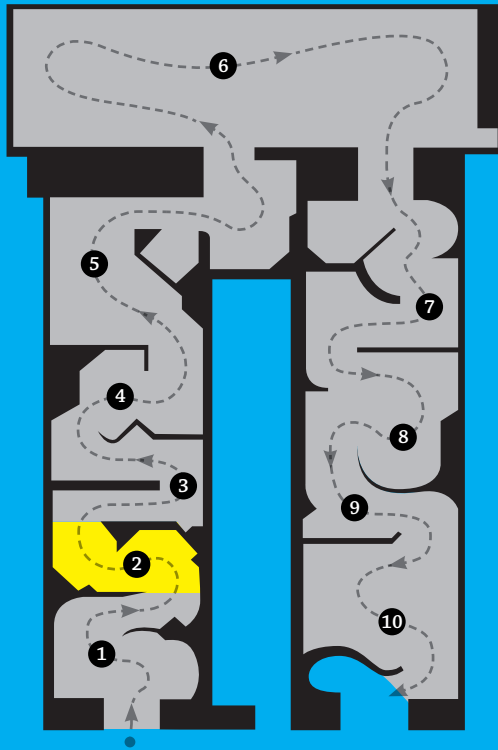
4 We find thick, uniform sediments, laid down by water and full of fossils, spread across continents thousands of feet above present sea level. In these rocks is also evidence of rapid splitting and collision of continents.

3 We encounter sediments and reefs that built up between the Creation and the Flood.

2 We see sediments miles thick without animal or plant fossils. These were apparently formed on the edge of continents as the continents rose out of the water on Day Three of Creation Week.

1 We see created rocks without any fossils in them.

As we step through the rocks . . .



THE CAMBRIAN SEAS

(CAMBRIAN, ORDOVICIAN, SILURIAN)

View the different ocean habitats during Noah's day, filled with strange seafloor creatures like trilobites and fearsome 4-ton armored fish like *Dunkleosteus*.

HELPFUL READING:

- *What Explains the Cambrian Explosion?*
<http://www.answersingenesis.org/articles/am/v5/n1/life-explosion>

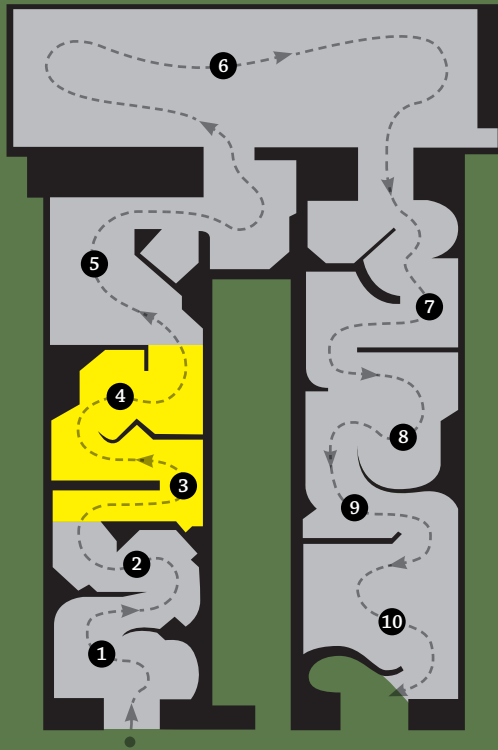


THE CAMBRIAN EXPLOSION

Did life suddenly explode on the scene during the Cambrian Period?

Actually, rather than representing a snapshot of life 500–600 million years ago, this layer of rock represents a snapshot of a series of marine ecosystems that were buried in the beginning stages of the Flood 4,300 years ago.

Paleontologist Dr. Kurt Wise suggests that as you look at the museum mural of the “Cambrian Explosion,” you should think of it as a picture of life before the Flood. He points out that the animals found in this layer are complex, completely formed, and are part of fully integrated ecosystems of marvelous beauty and wonder, reflective of the nature of the Creator. Some of the animals buried in Cambrian rocks are part of huge groups of thousands of species completely unknown in the present, like the trilobites, the sponge-like archaeocyathans, the crusting-algae-like stromatoporoids, and the tabulate and rugosan corals. Others (echinoderms, the mollusks, and the brachiopods) are broadly classified in modern groups but showed a much greater diversity than we observe in the present. Other animals, especially those buried in Ediacaran rocks just below the Cambrian, are just plain weird, like the Ediacaran and Tommotian faunas.

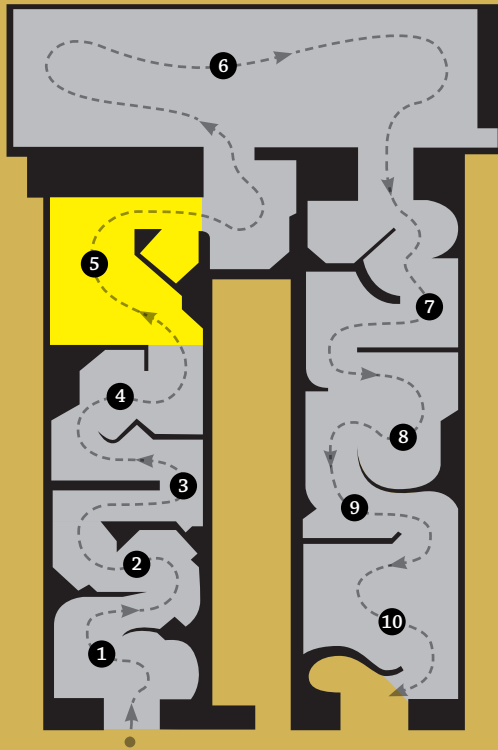


SWAMPY “FORESTS” (DEVONIAN, CARBONIFEROUS)

View bizarre hollow plants and amphibian-like animals, such as *Tiktaalik*, which lived among the roots of bog-like mats floating on the pre-Flood ocean.

HELPFUL READING:

- ***Tiktaalik***
<http://www.answersingenesis.org/articles/am/v5/n1/stepping-stones>
- ***Sinking a Floating Forest***
<http://www.answersingenesis.org/articles/am/v3/n4/floating-forest>
- ***How Did We Get All This Coal?***
<http://www.answersingenesis.org/articles/am/v8/n2/how-did-we-get-coal>



SANDY COASTS (PERMIAN)

View a hall full of odd four-legged creatures, such as the 6-foot (2 m) amphibian *Eryops* and the sail-backed *Dimetrodon*, which waddled across the sandy pre-Flood coasts.

HELPFUL READING:

- *Exotic Communities Buried by the Flood*

<http://www.answersingenesis.org/assets/pdf/am/v3/n4/exotic-communities.pdf>



THE DEVONIAN: DID FISH BECOME AMPHIBIANS?

Evolutionists suggest that it was during the so-called “Devonian” period that fish evolved into amphibians. The museum may even have a picture of the famous fish that crawled out onto the land.

However, another interpretation better explains the creatures found in this fossilized formation. Rather than viewing the fossils in a step-by-step evolutionary fashion, think of them as a group of animals that were buried together in the Flood, 4,300 years ago.

Paleontologist Dr. Kurt Wise believes that a massive (sub-continent to continent size) pre-Flood floating forest was buried in stages during the beginning of the Flood, and that this explains the Devonian animals (the “Devonian” was a location in the floating forest, not a place in time).

“Living among the flora of the floating forest was an associated fauna. This fauna would have ranged from fish which lived in the pools in the forest floor, to amphibians which inhabited the aquatic/terrestrial interface, to insects and small animals which lived in the terrestrial environment of the understory and canopy. The permanent destruction of the floating forest biome would explain why virtually all Paleozoic ‘land’ animals are extinct. It would also provide a reasonable explanation for the stratigraphic position, the environment, and the morphology of the animals which appear to be fully functional morphological intermediates between fish and amphibians (e.g., *Ichthyostega*).” (K. Wise, “The Pre-Flood Floating Forest,” *Proceedings of the Fifth International Conference on Creationism*, Creation Science Fellowship, 2003, p. 376)

In the next three quotes, creationist geologist Paul Garner elaborates.

The Devonian tetrapods are thought to have lived a predatory lifestyle in weed-infested shallow water. They were therefore equipped with characteristics appropriate to that habitat (e.g., crocodile-like morphology with dorsally placed eyes, limbs and tails made for swimming, internal gills, lateral line systems). Some of these features are also found in fishes that shared their environment.

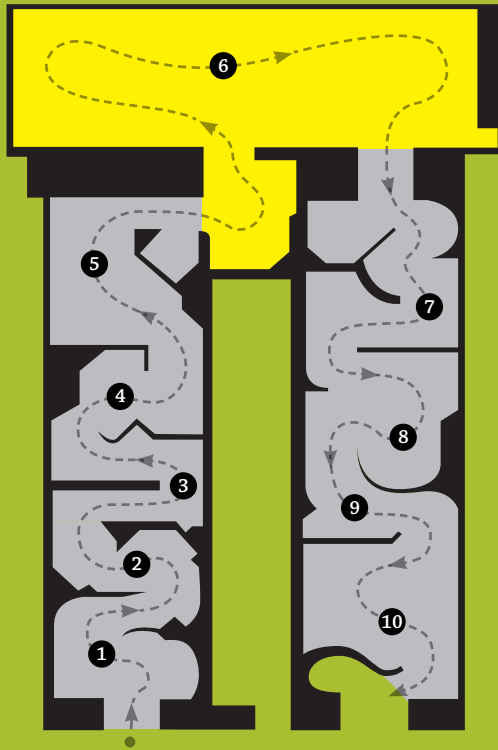
Were these creatures “transitional forms”?

The mosaic pattern makes it difficult to identify organisms or groups of organisms that possess the “right” combination of characters to be considered part of an evolutionary lineage. Consider the tetrapod-like lobe-fins *Panderichthys* and *Elpistostege*. Despite their appearance, these fish have some unique characters (such as the design of the vertebrae) that rule them out as tetrapod ancestors. At best, evolutionists can only claim that they are a model of the kind of fish that must have served as that ancestor. . . . Another example is *Livoniana*, a so-called “near tetrapod” known from two lower jaw fragments. It possesses a curious mixture of fish-like and tetrapod-like characteristics, but it also has up to five rows of teeth, a feature not seen either in the fishes from which it is thought to be descended nor the tetrapods into which it is said to be evolving. That the mosaic distribution of characters can cause great confusion is exemplified by the recent discovery of *Psarolepis*, a fish from the Upper Silurian/Lower Devonian of China, which combines characters found in placoderms, chondrichthyans, ray finned fishes, and lobe-fins.

Consider also the changes needed to go from fish to amphibians.

. . . in fish the head, shoulder girdle, and circulatory systems constitute a single mechanical unit. The shoulder girdle is firmly connected to the vertebral column and is an anchor for the muscles involved in lateral undulation of the body, mouth opening, heart contractions, and timing of the blood circulation through the gills. However, in amphibians the head is not connected to the shoulder girdle, in order to allow effective terrestrial feeding and locomotion. Evolutionists must suppose that the head became incrementally detached from the shoulder girdle, in a step-wise fashion, with functional intermediates at every stage. However, a satisfactory account of how this might have happened has never been given.

(Paul Garner, “The Fossil Record of ‘Early’ Tetrapods: Evidence of a Major Evolutionary Transition?” *TJ* 17:2, 2003, pp. 111–117, available online at www.answersingenesis.org/tj/v17/i2/tetrapod.asp.)



DINOSAUR HALL

(TRIASSIC, JURASSIC, AND CRETACEOUS)

View reptiles that lived in the continent's interior. *Allosaurus* and *Stegosaurus* apparently lived in one region (Jurassic), while *Tyrannosaurus* and *Triceratops* lived elsewhere (Cretaceous).

HELPFUL READING:

- *Noah's World—Same Time, Different Place*
<http://www.answersingenesis.org/articles/am/v6/n4/noahs-world>
- *Did Dinosaurs Turn into Birds?*
<http://www.answersingenesis.org/articles/nab/did-dinosaurs-turn-into-birds>
- *Dinosaurs—Living Large*
<http://www.answersingenesis.org/articles/am/v5/n1/living-large>



AGE OF THE DINOSAURS?

Throughout your journey in the dinosaur halls, you'll read a lot about the "age of the dinosaurs," with terms like Triassic, Jurassic, and Cretaceous periods, and phrases like "millions of years ago."

Keep in mind that much of what you're reading is evolution-based storytelling, and not actual fact. Remember, scientists do not find dinosaur bones with attached tags that say, "Hi, I'm 178 million years old." These ages are *interpretations*.

The fossils that have been found provide a snapshot of the *death* of that particular dinosaur—not a comprehensive picture of the dinosaur's *life*. Most creationists believe that the various layers in which different dinosaurs are found represent different stages of burial during the Flood (4,300 years ago).

Additionally, contrary to what the museums may be telling you, fossilization does not require long time periods—simply the right conditions. In fact, fossilization usually requires very little time. Otherwise the evidence of skin, bones, eggs, footprints, etc. would be erased by scavengers, micro-organisms, weathering, and other decay processes.

In fact, scientists have recently discovered that some *Tyrannosaurus rex* bones may still have soft tissue in them. This confirms that the bones can't be millions of years old, because the soft tissue would have decayed long ago. For more information, see www.answersingenesis.org/docs2005/0328discovery.asp.



WHERE ARE THE GREAT BEASTS TODAY?

Several animals that were once thought to be extinct are now known to be alive (for example, the coelacanth). In recent years there has been intriguing testimony from people living near the dense jungles of central Africa and New Guinea to suggest that dinosaurs might still be alive. But we need more evidence to be sure.

If dinosaurs are indeed extinct, did they die out when a giant meteor slammed into the earth about 65 million years ago? Did they evolve into birds? (See p. 63 for the answer.) These are the stories evolutionists tell us in the secular natural history museums. The truth is that, if they are truly extinct, the evidence presented previously (e.g., dragon legends, possible eye-witness reports) indicates that they died out sometime over the past few hundred or thousand years since the Flood. And this would have likely been caused by the same factors that cause many animals to go extinct today: loss of habitat and food supply, disease, climate change, hunting pressures by man or other animals, etc.

There are many problems with the impact theory for dinosaur extinction. As you learn about this idea from the museum, consider the following points that have been made by evolutionists Charles Officer and Jake Page in *The Great Dinosaur Extinction Controversy*. Addison-Wesley, 1996:

- The number of dinosaurs declines gradually as one goes upward through the fossil record, rather than all at once, as the impact theory would suggest.
- Many species of animals that require light survived the alleged impact and the subsequent darkening of the skies that supposedly resulted from the impact debris.

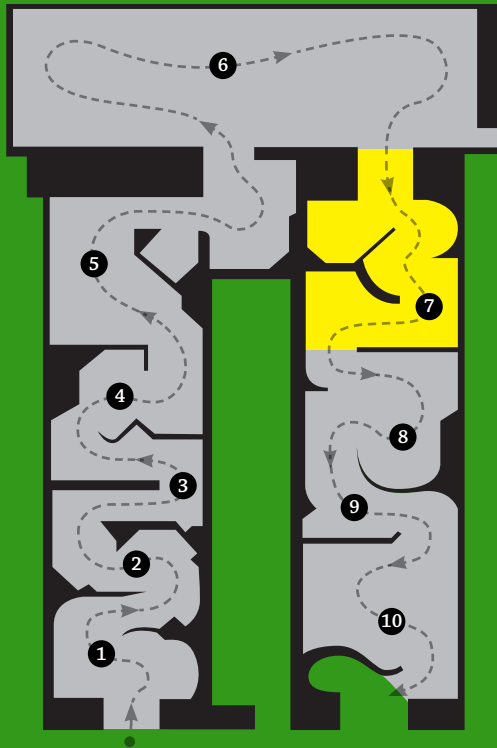
For more information, see www.answersingenesis.org/go/dinosaurs.

DID DINOSAURS TURN INTO BIRDS?

In addition to the biblical teaching, there are many scientific problems with the dino-bird idea.

- The lungs of reptiles and birds are structured differently. Dinosaurs (reptiles) have bellows-like lungs (the air is pumped in and out), as humans do. Birds have a circulatory lung, in which the air flows through the lung, without being pumped. Evolutionist Dr. Michael Denton has said, "It doesn't require a great deal of profound knowledge of biology to see that for an organ which is so central to the physiology of any higher organism, its drastic modification in that way by a series of small events is almost inconceivable. This is something we can't throw under the carpet again because, basically, as Darwin said, if any organ can be shown to be incapable of being achieved gradually in little steps, his theory would be totally overthrown." (See www.answersingenesis.org/creation/v21/i4/design.asp.)
- According to evolutionist Dr. Alan Feduccia, "New research shows that birds lack the embryonic thumb that dinosaurs had, suggesting that it is 'almost impossible' for the species to be closely related." (*The Cincinnati Enquirer*, October 25, 1997)
- Birds have streamlined bodies, enabling them to be efficient flyers. In addition, most have hollow bones, which make them lightweight, and which are part of their respiratory system. They also have powerful flight muscles. Reptiles lack these features.
- Although some museums may claim that feathers are merely modified scales, careful research has shown this is not true.

Anatomist Dr. David Menton describes the most fundamental difference between feathers and scales: "The feather grows out of a follicle. A follicle is a tubular down-growth of the epidermis that protrudes deeply into the skin—all the way down to underlying bone in the case of primary feathers. And this tube of specialized living skin produces the feather inside of itself from a growth matrix at the very bottom. The reptilian scale has absolutely nothing to do with follicles. All of the scales can shed as a sheet because they're nothing but folds in the epidermis, like fabric folded over on itself, whereas feathers would have to come out of their own follicle." ("Bird evolution flies out the window," *Creation* 6(4), September 1994, pp. 16–19.) Add to that the findings by evolutionists: "At the morphological level feathers are traditionally considered homologous with reptilian scales. However, in development, morphogenesis, gene structure, protein shape and sequence, and filament formation and structure, feathers are different." (A.H. Brush, "On the origin of feathers," *Journal of Evolutionary Biology* 9, 1996, pp. 131–142.)



POST-FLOOD RECOVERY (TERTIARY)

View creatures that died in a succession of regional disasters after the Flood. Extinct species of camels, horses, and other mammals look similar to modern species because they descended from the same original “kinds,” which God saved on the Ark.

HELPFUL READING:

- ***Continuing Catastrophes***
<http://www.answersingenesis.org/articles/am/v3/n4/continuing-catastrophes>
- ***Creation's Hidden Potential***
<http://www.answersingenesis.org/articles/am/v4/n1/hidden-potential>
- ***Forests in Antarctica After the Flood?***
<http://www.answersingenesis.org/articles/am/v5/n3/antarctic-forests>
- ***Variety Within Created Kinds***
<http://www.answersingenesis.org/articles/am/v5/n2/variety-within-kinds>



DOES SPECIATION = EVOLUTION?

Some museums show their lack of understanding of the biblical position when they claim that creationists believe in the “fixity of species,” that is, that all animals have remained unchanged since the beginning. However, this does *not* represent the creationist position.

We freely admit (based on information gleaned from the Bible) that God created the original animal and plant kinds with great genetic variation and that descendants of those original created kinds can vary greatly within their kind.


In most cases, a kind represents a group of animals that can mate with others in that group. It appears from ongoing creationist research that the created “kinds” were much larger genetic categories than the “species” designation that scientists use today. Except for mankind, each created kind was at the genus or even family level (perhaps higher in some cases) of modern taxonomic classification.

For example, lions, tigers, jaguars, and leopards are classified as different species, but are probably all members of an original cat kind. And donkeys, zebras, Thoroughbreds, and Arabian horses are probably all part of the original horse kind. Some have suggested that there may have been as few as 50 different dinosaur kinds (compared to the over 1,000 species and 500 genera that the evolutionists classify). For example, the ceratopsian kind might include triceratops, monoceratops, etc.

The representatives of each kind that survived the Flood had enough information in their DNA to produce the wide variety of animals that we see today. The varieties that we only see preserved in the fossil record came from the genetic potential in the DNA of the original created kinds.

After erecting the false view, the museums may then proceed to knock down the “fixity of species” argument by showing that animals change over time, and that new species have been observed to arise. This, they claim, is evidence for molecules-to-man evolution. For example, the exhibits may feature varieties of weasels, rabbits, dogs, and cats. The signage then points out, “See, animals change. That’s evolution.”

When museums use evolution to mean both “change in features over time” and “the history of life on earth,” this is an example of equivocation or “bait-and-switch.” They are using examples of variation *within* one of the created kinds (as evidenced by a new



species arising, for example) as proof of microbe-to-microbiologist change between different kinds.

Speciation can be defined as “the process of change in a population that produces distinct populations which rarely interbreed in nature due to geographic isolation or other factors.” This observable process (which, incidentally has been shown to happen much faster than evolutionists expected) fits into the category of operational science (not origins science). All informed creationists accept speciation as a fact of nature, but contend that this process cannot explain goo-to-you-via-the-zoo evolution.

The formation of a new species generally results in a loss of genetic information—the opposite type of change required by molecules-to-man evolution. As two populations of the same created kind become separated, genetic variation is diminished, resulting in the formation of a new species. But speciation has never been observed to turn one kind of animal into another kind. There is a limit to the amount of change a population can produce.

When small changes that arise as a result of the loss of information are used as evidence for molecules-to-man evolution, the equivocating switch has occurred. Be on the lookout for when museums do this in their signage.

For more information, visit www.answersingenesis.org/go/speciation.



IS NATURAL SELECTION EVIDENCE FOR EVOLUTION?

You may encounter many examples of “natural selection in action” while visiting the museum. Many evolutionists claim that natural selection is the process that drives molecules-to-man evolution; however, evolution requires that, over time, living things must add more information to their DNA as they gain new features, abilities, or structures. Natural selection actually works in the *opposite* direction of what molecules-to-man evolution requires. It selects from *already-existing* genetic information, and cannot generate *new* genetic information.

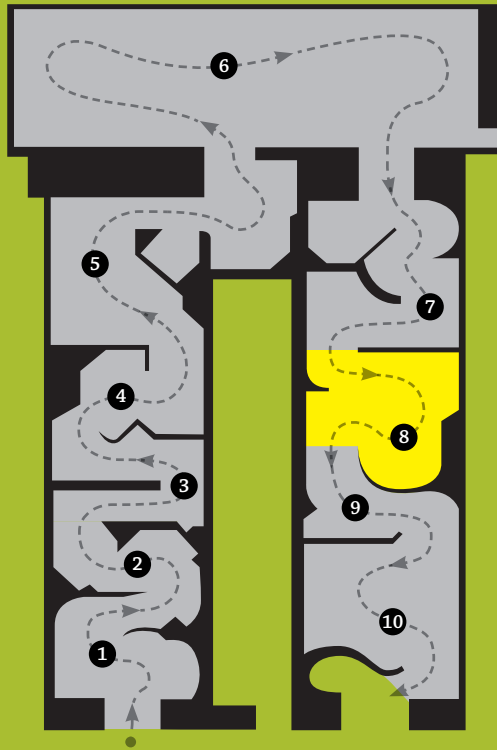
God created the original animal kinds with much diversity in their DNA, so that as they reproduced and filled the earth, their descendants were able to adapt to many different environments. Scientists *have* observed this—animals reproduce “after their kind” (dogs have puppies, cats have kittens, geese have goslings, kangaroos have joeys, etc.).

The genetic makeup of some members of a kind is more suitable to certain environments. Natural selection is the process by which animals die out when they don’t have the genetic makeup that allows them to survive in their environment.

Those animals that survive reproduce more animals like themselves. For example, many animals that live in drier regions of the world are able to gain most of the water they need from the plants they eat. Animals without this ability would have a harder time trying to survive in that region, and would eventually die out.

Natural selection may bring about a new *species* of animal, but it cannot generate a new *kind* of animal.

For more information, visit www.answersingenesis.org/go/selection.



DAWN OF HUMANKIND

Displayed are four sets of bones side by side—one ape (Lucy) and three humans (*Homo erectus*, Neanderthal, and a modern human). The physical differences between the bodies of apes and humans are clear—and worth pointing out. Genesis 1:24–27 leaves no doubt that they were created separately.

HELPFUL READING:

- ***When Did Cavemen Live?***
<http://www.answersingenesis.org/articles/am/v7/n2/when-did-cavemen-live>
- ***Who Were Cavemen?***
<http://www.answersingenesis.org/articles/am/v7/n2/who-were-cavemen>
- ***Lucy Was Buried First***
<http://www.answersingenesis.org/articles/am/v3/n2/lucy-buried-first>

WHAT ARE THEY, REALLY?

Ardipithecus

This genus is composed of a group of extinct apes.

Australopithecines

This is a group of extinct apes. Although often portrayed otherwise, australopithecines had obviously ape skulls, pelvises, hands, and feet.

***Australopithecus afarensis* (Lucy)**

Paleoanthropologists Jack Stern and Randall Sussman have reported that Lucy's hands are "surprisingly similar to hands found in the small end of the pygmy chimpanzee-common chimpanzee range." They report that the feet, like the hands, are "long, curved and heavily muscled" much like those of living tree-dwelling primates. The authors conclude that no living primate has such hands and feet "for any purpose other than to meet the demands of full or part-time arboreal (tree-dwelling) life." (*American Journal of Physical Anthropology* 60, 1983, pp. 279–317.)

A more recent report concludes that the australopithecine jaw closely resembles that of a gorilla. See www.answersingenesis.org/articles/2007/04/18/farewell-lucy.

Cro-Magnon

Far from being "primitive," Cro-Magnons were early relatives of ours, fully human. Living sometime after the dispersion at Babel, this group of people knew how to build huts, make stone paving floors, construct kilns, and bake pottery. They made tools out of bone, flint, ivory, antler, and wood. They knew how to carve flutes of bone, make jewelry, and sew clothing. Their artwork (cave murals) was "worthy of a place among the masterpieces of world art" (*Encyclopedia Britannica*, 15th ed., volume 5, p. 291).

Homo erectus

These were our ancestors who used stone tools, made fire, buried their dead, carved rock into figurines, built shelters, and even used watercraft. Of this taxon, Professor Marvin Lubenow (who has studied the claims regarding human evolution for 30 years) writes:

When we compare the crania of *Homo erectus* with those of early *Homo sapiens* and Neanderthal, the similarities are striking. My own conclusion is that *Homo erectus*

and Neanderthal are actually the same: *Homo erectus* is on the lower end, with regard to size, of a continuum that includes *Homo erectus*, early *Homo sapiens*, and Neanderthal. (*Bones of Contention*, Grand Rapids: Baker, 2004, 2nd edition, p. 127.)

Homo ergaster

This was a name suggested for some East African *Homo erectus* fossils.

Laetoli footprints

These footprints, although linked with the australopithecines, actually belong to a human. According to evolutionist R.H. Tuttle:

Strictly on the basis of the morphology of the G prints [prints found at a site labelled "G"], their makers could be classified as *Homo sp.* because they are so similar to those of *Homo sapiens*, but their early date would probably deter many paleoanthropologists from accepting this assignment. I suspect that if the prints were undated, or if they had been given younger dates, most experts would probably accept them as having been made by *Homo* . . .

If the prints were produced by a small species of *Australopithecus* (southern ape) then we must conclude that it had virtually human feet which . . . were used in a manner indistinguishable from those of slowly walking humans. . . . The feet that produced the G trails are in no discernible features transitional between the feet of apes . . . and those of *Homo sapiens*. They are like small barefoot *Homo sapiens*. (M.D. Leakey and J.M. Harris, eds., *LAETOLI—A Pliocene site in Northern Tanzania*. London: Clarendon Press, 1987, pp. 503–523.)

Homo habilis

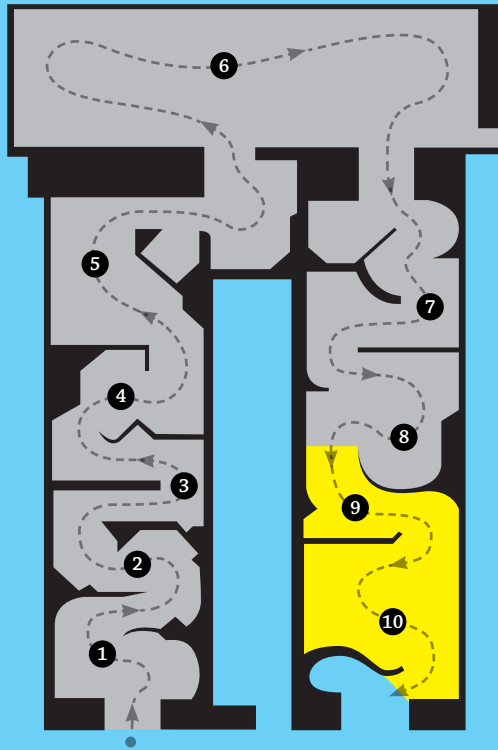
This is an invalid taxon composed of a mixture of several species, with most of the fossils belonging to australopithecines, according to Professor Marvin Lubenow (see www.answersingenesis.org/docs2006/0417ethiopian.asp).

Neanderthal

Neanderthals were fully human. According to Neanderthal authority Erik Trinkaus:

. . . there is nothing in Neanderthal anatomy that conclusively indicates locomotor, manipulative, intellectual, or linguistic abilities inferior to those of modern humans. (E. Trinkaus, "Hard Times Among the Neanderthals," *Natural History* 87:10, p. 58.)

For more, see www.answersingenesis.org/articles/am/v1/n2/worthy-ancestors and www.answersingenesis.org/articles/am/v2/n1/worthy-ancestors-2.



ICE AGE (QUATERNARY)

View giant sloths, mastodons, and other amazing creatures that were well suited to survive the Ice Age, which arose briefly in the aftermath of the Flood.

HELPFUL READING:

- *When was the Ice Age?*
<http://www.answersingenesis.org/articles/am/v8/n2/ice-age-biblical-history>
- *Why Were the Animals So Big?*
<http://www.answersingenesis.org/articles/am/v8/n2/why-were-animals-big>



THOSE WILD AND WOOLLY MAMMOTHS

The extinction of the woolly mammoth, and many other Ice Age mammals, is presented as a mystery in most museums. However, meteorologist Michael Oard offers a plausible explanation based on his model of the post-Flood Ice Age. After the Ice Age ended (around 3,500 years ago), temperature differences between summer and winter would have become more extreme in the northern latitudes. The animals would have needed to quickly adjust to much colder winters. Oard explains how this affected the mammoths that lived in these areas (e.g., Siberia, Alaska, the Yukon, northern parts of the U.S.A.):

They would have required extra food to keep themselves warm. In addition to suffering from the cold, the ice sheets were melting and causing occasional superfloods. They also had to contend with gigantic dust storms, boggy ground from permafrost at the edge of the ice sheets, drought, grass fires, etc. The woolly mammoth and other large herbivores would be especially hard hit, partly because they required so much more food and water. They would be tottering on the edge of extinction within a short time. Carnivores and carrion birds would have their fill for a time, but as their food source died, it would be their turn to go extinct. The end-Ice Age mass extinctions were selective in that mainly large animals went extinct.

Oard goes on to suggest that the main cause of Ice-Age-animal extinction in the Northern Hemisphere was giant dust storms that resulted from a drying climate and changing temperatures. He bases his ideas on the fact that most of the mammoths and other animals are found entombed in wind-blown silt (loess).

Loess is rather common south of and within the periphery of the former ice sheets in the Northern Hemisphere. It forms a thick blanket in parts of central China. This was probably desert loess that blew in from the west. . . . large parts of Siberia are also covered with a layer of loess. In North America, we find large areas of stabilized sand dunes; for instance, extensive sand dunes cover areas of the Great Plains. The Nebraska sand hills blanket a large portion of western Nebraska and are up to 400 feet deep! Similar dunes are found north of the Cypress Hills in southeast Alberta and southwest Saskatchewan. Dunes are common in northern Europe and northwest Asia. Today, all of these dunes are mostly stabilized by vegetation. The dunes attest to the severity of the drought and dust storms during deglaciation. (*Frozen in Time*, Master Books, 2004, chapter available at www.answersingenesis.org/home/area/fit/chapter16.asp.)

THE MAIN POINT

Worldview is not a side issue; it colors everything.

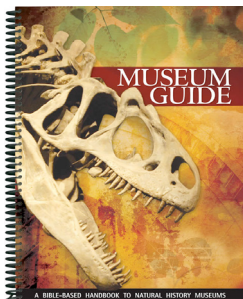
From start to finish, the *Evolving Planet* exhibit hypothesizes a series of aimless changes and extinctions, with no hint of any Creator or ultimate purpose. Humans are merely a footnote.

The Bible, in contrast, identifies the Maker and Mover of earth history. It places mankind at the center of God's plan of redemption, beginning with Adam's creation on Day Six and his fall into sin, climaxing with Jesus Christ's saving work on the Cross, and culminating in the new heaven and earth where God will set everything right.

God's dealings with mankind take center stage in a biblical understanding of the fossil exhibits. Because the Creator is holy and mankind's sin was rampant, He destroyed the world by the global Flood. Yet He offered a new beginning as the world was refilled with life. Today, God offers each of us a new beginning, which He has made possible by judging His only Son for our sins.

That message makes any trip to the Field Museum worthwhile

HELPFUL RESOURCE:



Museum Guide

Make your next visit to the natural history museum more than just entertaining—make it factual and fascinating, too! Consider starting your own museum tour outreach. Rather than being perplexed about the continual “millions of years” stories, you’ll be enlightened with a biblical perspective on such things as coal, diamonds, “apemen,” whale “evolution,” dinosaurs, the origin of life, and more! Along with the true history behind more than 100 common museum exhibits, this long-awaited Museum Guide includes beautiful pictures and teaches you how to understand natural history from a biblical perspective. Excellent for school field trips to your favorite museum!

www.answersingenesis.org/store/product/museum-guide/?sku=10-2-293&