## The Geologic Column and the Fossil Record (Missing Links and the Cambrian Explosion)



Joshua Gurtler, April 24, 2011

# REVIEW

- 1. Explain (1) the positive and (2) the negative principle regarding evolutionary change in animal kinds?
- 2. Why is Darwinian evolution not truly a scientific theory?
- 3. What is the *"Fruit Fly Principle"* regarding genetic mutations? (i.e., what are the three criteria necessary for a mutation to effect Darwinian evolution?)

### What We Will Learn in This Lesson

I. Darwinian evolution must be proved from the fossil record, or the hypothesis fails.

II. Animals <u>do not change</u> throughout the fossil record - stasis prevails.

III. Animals appear fully formed from the earliest layers of the geological column (aka, "The Cambrian Explosion").

IV. Evolutionists admit that the fossil record provides no proof for macroevolution

V. The fossil record reflects <u>worldwide</u> <u>flood sedimentation</u>.

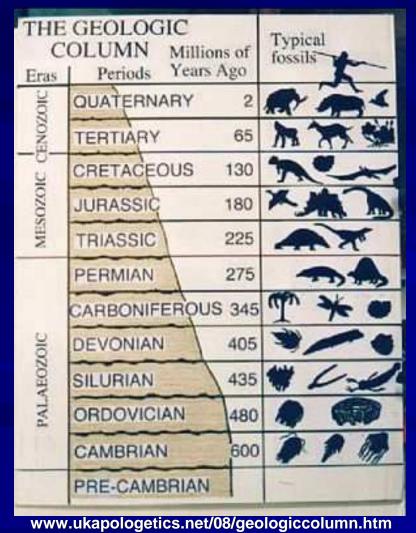
## **Definitions**

# **1. Geology-** The study of the history of the earth preserved in the record of the rocks



## **Definitions**

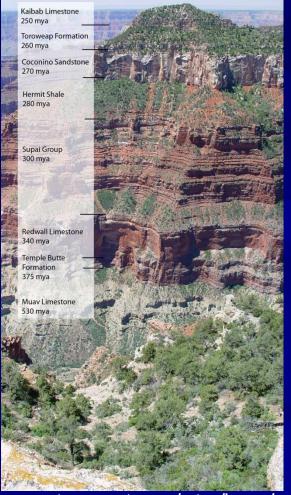
# **2. Geologic Column-** The sum total of sedimentary layers in the earth's crust



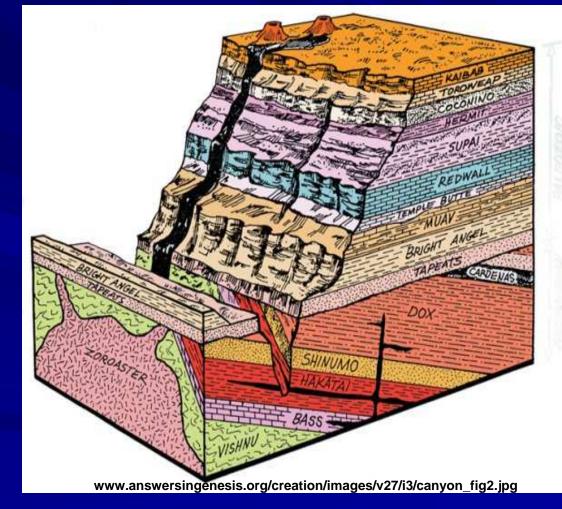
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## **Definitions**

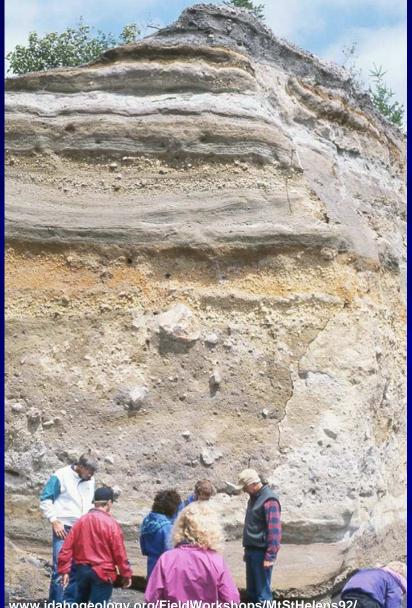
# **3. Strata-** Parallel layers of rock deposited in superposition in the geologic column



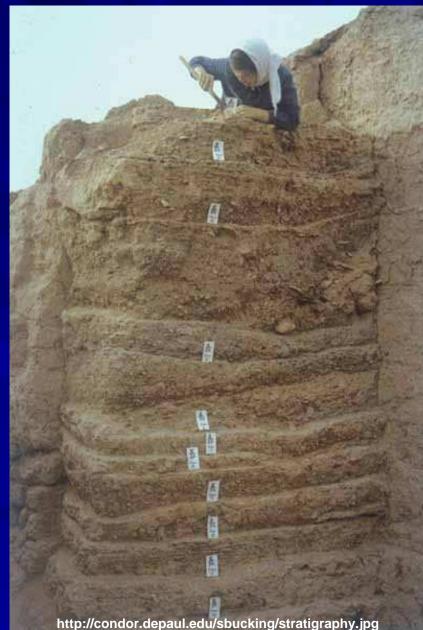
www.astronomynotes.com/nature/images/ grndcnyn-geolayersb-labels.jpg



# **4. Stratigraphy-** A branch of geology that classifies, interprets, and dates strata found in the geologic column







# **5.** Paleontology- Study of the history of life as preserved in the fossils of the geologic column



www-news.uchicago.edu/releases /photos/expedition/excavation.jpg

www.detectingdesign.com/fossilrecord.html

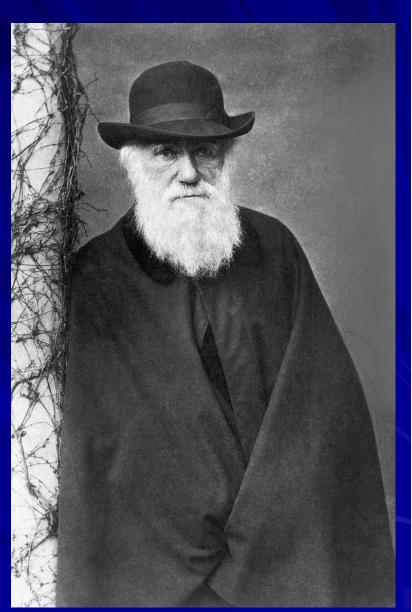
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What is Evolution? (AKA, Neo-Darwinism, Darwinism, or The General Theory of Evolution)

The philosophy that all life on earth gradually evolved over billions of years from a single-celled organism by means of random mutations and natural selection (i.e., survival of the fittest).

DARWINISM MUST CLEARLY DEMONSTRATE THIS FROM THE FOSSIL RECORD OR THE HYPOTHESIS FAILS I. The Fossil Record Must **Reflect Darwinism or The** Hypothesis Fails: QUOTE #1 *"The number of intermediate"* and transitional links, between all living and extinct species, <u>must have</u> been inconceivably great"

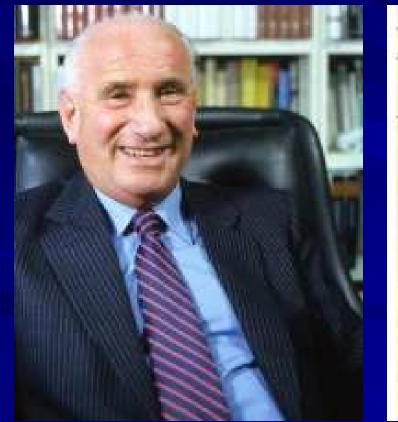
- Charles Darwin, 1872, <u>The Origin of</u> <u>Species</u>, p. 266



#### I. The Fossil Record Must Reflect Darwinism or The Hypothesis Fails. Quote #2:

"The <u>most important</u> evidence for the theory of evolution is that obtained from the study of paleontology [fossils]. Though the study of other branches of zoology, such as comparative anatomy or embryology, might lead one to suspect that animals are all interrelated, it was the discovery of various fossils and their correct placing in relative strata and age that provided the main factual basis for <u>the modern view of evolution</u>."

Percamon Press



Implications of Evolution

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- Gerald A. Kerkut. 1960. *The Implications of Evolution* . p. 134 (London: Pergamon). [Ph.D. in Zoology, Cambridge, Head of the Department of Neurophysiology, University of Southampton]

### I. The Fossil Record Must Reflect Darwinism or The Hypothesis Fails. Quote #3: "That evolution actually did occur can <u>only be</u> <u>scientifically established</u> by the discovery of the fossilized remains of representative samples of

those intermediate types...

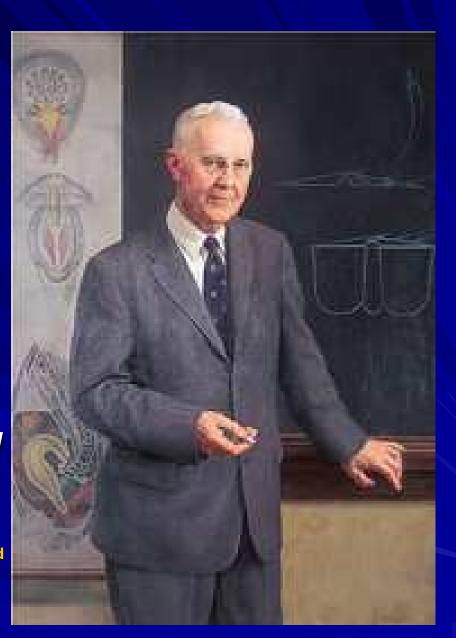


- Austin H. Clark, *Quarterly Review of Biology*, December, 1928 (Biologist, Harvard Graduate, National Museum of Natural History)



#### I. The Fossil Record Must Reflect Darwinism or The Hypothesis Fails. QUOTE #4:

"Although the comparative study of living animals and plants may give very convincing circumstantial evidence, Fossils provide the only historical documentary evidence that life has evolved from simpler to more and more complex forms." - Carl O. Dunbar, *Historical Geology*, 2<sup>nd</sup> edition, New York: John Wiley and Sons, 1960, p. 47. (Ph.D., Yale, **Professor**, Yale)







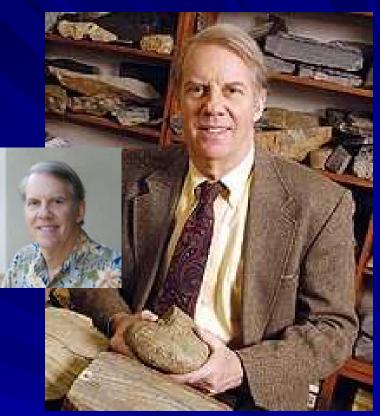
# I. The Fossil Record Must Reflect Darwinism or The Hypothesis Fails: QUOTE #5

"Naturalists must remember that the process of evolution is revealed <u>only through fossil forms</u>. A knowledge of paleontology is, therefore a prerequisite; <u>Only paleontology</u> can provide them with the evidence of evolution and reveal its course or mechanisms."

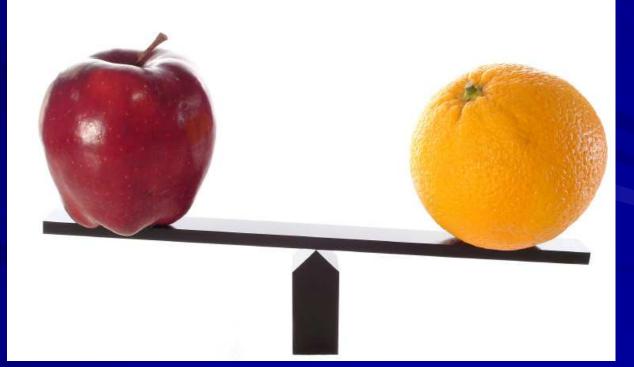
- Pierre-Paul Grasse, <u>Evolution of Living Organisms</u>, New York: Academic Press, 1977, p. 4; [French zoologist, past president of the French Academy of Sciences. Dobzhansky said that Grasse's "knowledge of the living world is encyclopedic."]

#### I. The Fossil Record Must Reflect Darwinism or The Hypothesis Fails: QUOTE #6

"... We must look to the fossil record for the ultimate documentation of large-scale change. In the absence of the fossil record, the credibility of evolutionists would be severely weakened. We might wonder whether the doctrine of evolution would qualify <u>as anything more</u> than an outrageous hypothesis."



- Steven M. Stanley, <u>Macroevolution: Pattern and</u> <u>Process</u>, San Francisco: W.H. Freeman and Co., 1979 [Paleontologist, Ph.D., Yale, Taught at Johns Hopkins and U. Hawaii] 15 Let's Conduct a Model Comparison of the Geologic Column Based on: A. The Creation Model B. The Darwinian Model



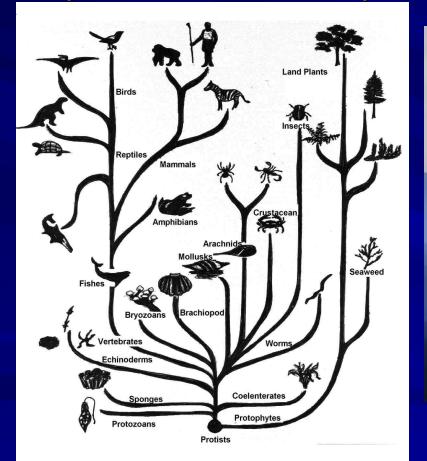
### **Model Comparison**

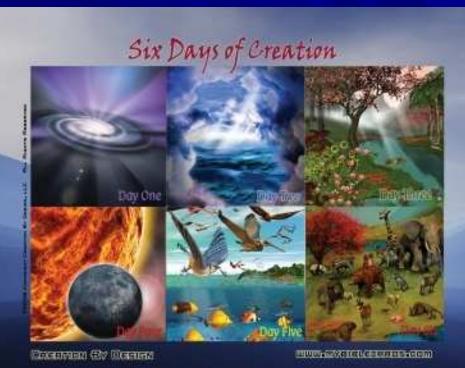
### **Darwinian Model**

(Microbe to Man Evolution)

## **Creation Model**

(Sudden Appearance of Life on Earth)





https://heartsathomestore.com

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## **Model Comparison**

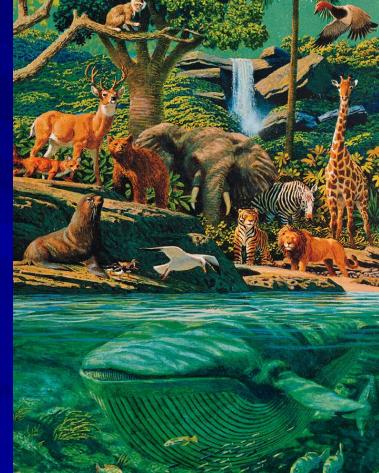
#### **Darwinian Model**

(Microbe to Man Evolution)

Land Plants Birds Reptiles Crustace Seaweed 282 Brachiopo Bryozoar Vertebrates hinoderm Coelenterates ponge Protophyte Protozoans Protists

### **Creation Model**

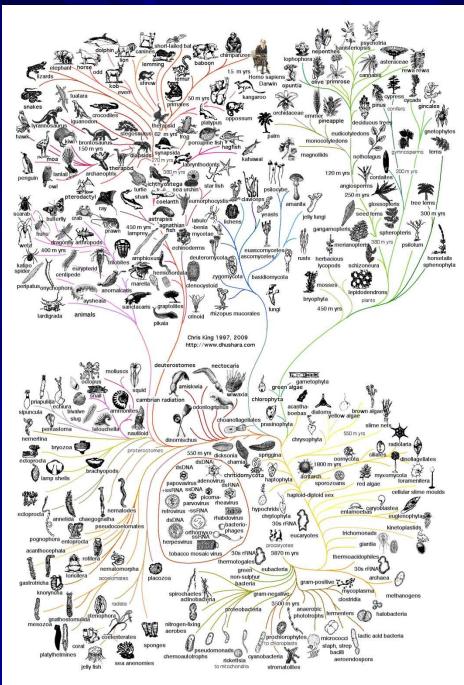
(Sudden Appearance of Life on Earth)



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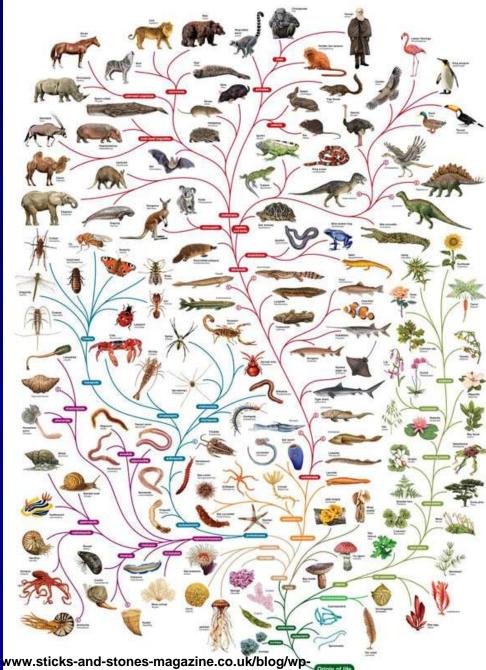
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The Darwinian Model **Predicts: #1**. The Simplest Life Forms at the **Bottom of the Geologic Column** with Greater **Complexity and Diversity of Life** Through **MILLIONS** of Years of Ascent



www.dhushara.com/book/unraveltree/life4CK.jpg

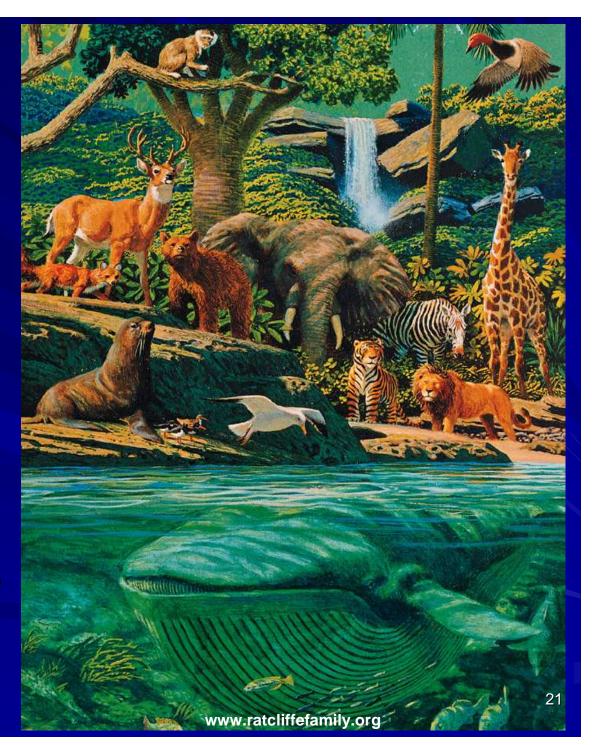
The Darwinian Model **Predicts: #2.** MILLIONS of **Transitional** Fossils (Intermediate Links) Animal Families <u>Must be</u> *Found* throughout the Geologic Column



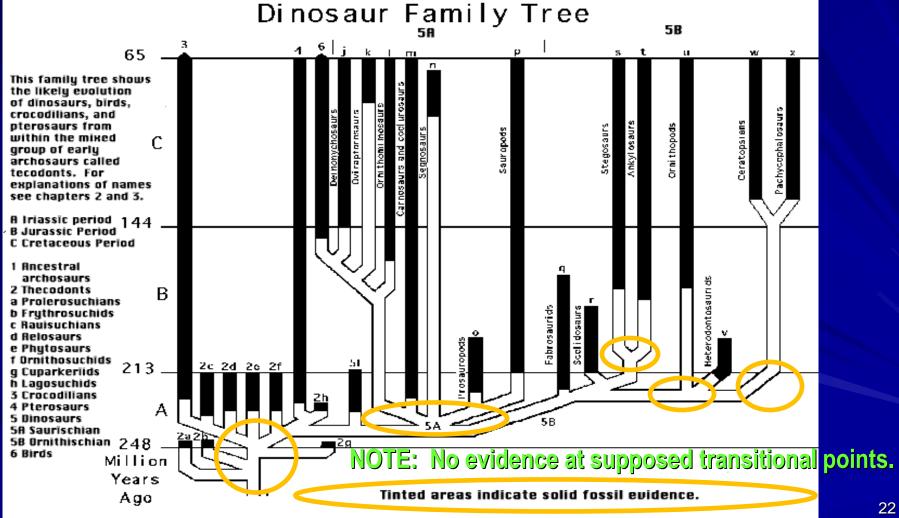
content/uploads/2009/11/TreeofLife.jpg

The <u>Biblical</u> <u>Creation</u> Model Predicts:

All Life forms
Suddenly Appear
on the Earth *Fully Formed* in an
EXPLOSION of
Highly Diverse Life
at the *Bottom* of the
Geologic Column



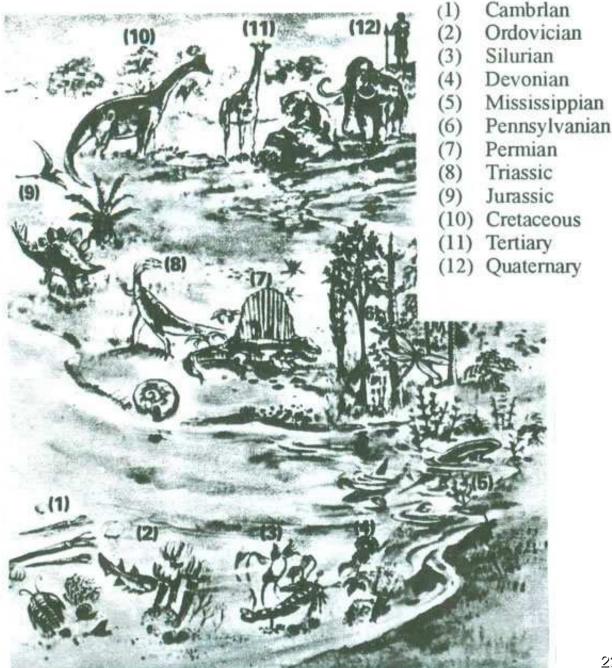




www.answersingenesis.org/images/dinochrt.gif Originally from Scientific American

#### The <u>Biblical</u> <u>Creation</u> Model Predicts:

**#3.** There Would be a Succession of **Fossils Ascending** the Geologic Column **Representing: (a) Terrestrial Animal** Habitats Progressively Submerged in the Great Noahic Flood, and (b) the Ability of Animals to **Escape to Higher** Ground



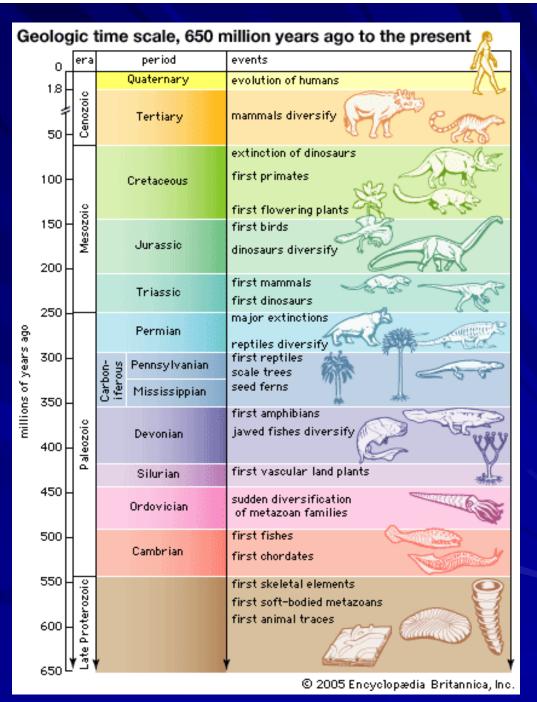
#### **The Biblical Creation Model Summarized**

II Peter Chapter 3, Verses 3-6 (ESV) "knowing this first of all, that scoffers will come in the last days with scoffing, following their own sinful desires. <sup>4</sup> They will say, "Where is the promise of his coming? For ever since the fathers fell asleep, all things are continuing as they were from the beginning of creation." <sup>5</sup>For they deliberately overlook this fact, that the heavens existed long ago, and (1) the earth was formed out of water and through water by the word of God, <sup>6</sup>and that by means of these (2) the world that then existed was deluged with water and perished."

Darwinian Interpretation of the Geologic Column

13 Periods Representing 130 Miles of Sediment

However...



#### **Problems with Darwinian Geologic Column**

- 1. Although there are 13 geologic periods, they are not found in succession in any one place on earth.
- 2. Although these 13 periods represent 130 miles of sediment, the average thickness of these layers anywhere on earth is only 1.5 miles (0-5 miles max.), while the earth entire crust is only 30 miles deep.
- 3. The Grand Canyon (1 mile deep) is one of the only places on earth where many of the geologic periods can be seen in one location, however, the Grand Canyon contains only 5 of the 13 geologic periods.



www.astrofoto.ca/stuartheggie/Grand\_Canyon/Grand\_Canyon\_23.jpg

#### How Do Geologists and Paleontologists Know that The Earth is 4.5 Billion Years Old and that The Geologic Strata Represents 1 Billion Years of History?

- 1. Not by empirical science. No living human has seen the construction of the geologic column. It is not empirically testable or subject to the scientific method.
- 2. Geologists and paleontologists must construct "historical narratives" (or devise explanations) based on their <u>personal biases and presuppositions</u> to explain the evidence.
- 3. That is, they impose their beliefs on the rocks.



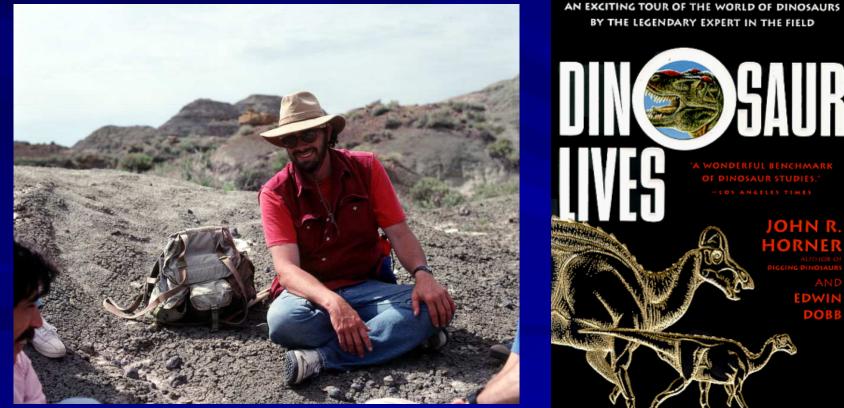
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www.hms-beagle.com/xampp/htdocs/shop/images/Fossils.jpg 27

#### **Paleontology is a Historical Science**

"...paleontology is a historical science, a science based on circumstantial evidence, after the fact. We can never reach hard and fast conclusions in our study of ancient plants and animals... These days it's easy to go through school for a good many years, sometimes even through college, without ever hearing that some sciences are historical or by nature inconclusive." - John R. Horner. *Dinosaur Lives*, 1997, p.19. [Discovered Maiasaura, Technical Director for Jurassic Park]



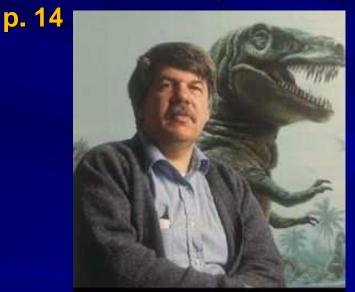
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#### Historical Science is 100% Contingent on an Individual's Philosophical Presuppositions (i.e., Personal Worldview)

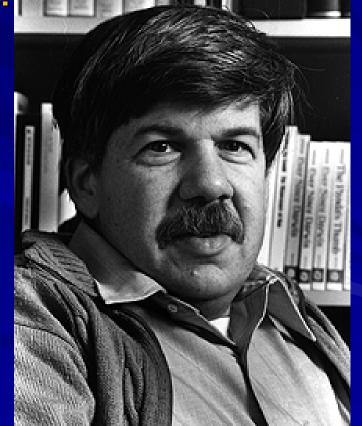
"An examination of the work of those paleontologists who have been particularly concerned with the relationship between paleontology and evolutionary theory, for example that of G. G. Simpson and S. J. Gould, reveals a mindfulness of the fact that the record of evolution, like any other historical record, must be construed within a complex of particular and general preconceptions not the least of which is the hypothesis that evolution has occurred."

-David B. Kitts, "Search for the Holy Transformation," review of *Evolution of Living Organisms*, by Pierre-P. Grassé, *Paleobiology*, vol. 5 (Summer 1979), pp. 353-355. [Kitts was Professor of History of Science, University of Oklahoma.]

"But our ways of learning about the world are strongly influenced by the social preconceptions and biased modes of thinking that each scientist must apply to any problem. The stereotype of a fully rational and objective 'scientific method,' with individual scientists as logical (and interchangeable) robots, is self-serving mythology." -- Gould, Stephen Jay, "In the Mind of the Beholder," Natural History, vol. 103 (February 1994), pp. 14-23.



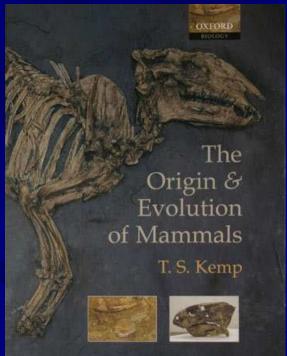
STEPHEN JAY GOULD
Reflections on His View of Life
Warren D. Allmon, Patricia H. Kelley, &



#### **Constructing the Historical Narrative**

"Of course there are many gaps in the synapsid fossil record, with intermediate forms between the various known groups almost invariably unknown. However, the known groups have enough features in common that it is possible to reconstruct a <u>hypothetical</u> intermediate stage."

-Tom S. Kemp, *Mammal-like Reptiles and the Origin of Mammals* (New York: American Press, 1982), p. 3. [Oxford, Dept. Zoology, Curator Zoological Collections]





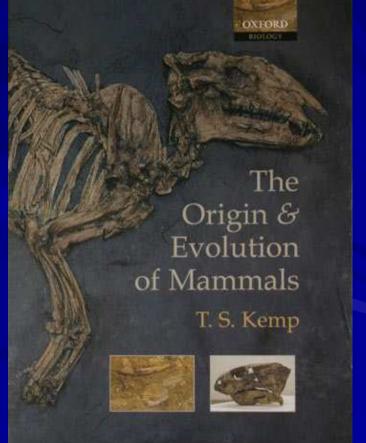
"It is a mistake to believe that even one fossil species or fossil 'group' can be demonstrated to have been ancestral to another. The ancestordescendant relationship may only be assumed to have existed in the absence of evidence indicating otherwise. . . That a known fossil or recent species, or higher taxonomic group, however primitive it might appear, is an actual ancestor of some other species or group, is an assumption scientifically unjustifiable, for science never can simply assume that which it has the responsibility to demonstrate." - Gareth V. Nelson, "Origin and Diversification of Teleostean Fishes," Annals of the New York Academy of Sciences (1971), pp. 22, 27. Nelson was in the Department of Ichthyology, American Museum of Natural History.





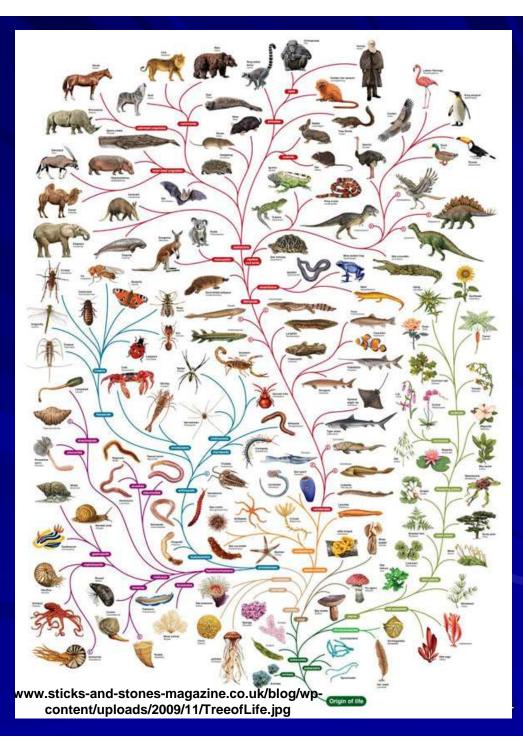
"Gaps at a lower taxonomic level, species and genera, are practically universal in the fossil record of the mammal-like reptiles. In no single adequately documented case is it possible to trace a transition, species by species, from one genus to another." -Tom S. Kemp, Mammal-like Reptiles and the Origin of Mammals (New York: American Press, 1982), p. 319. [Oxford, Dept. Zoology, Curator Zoological Collections]



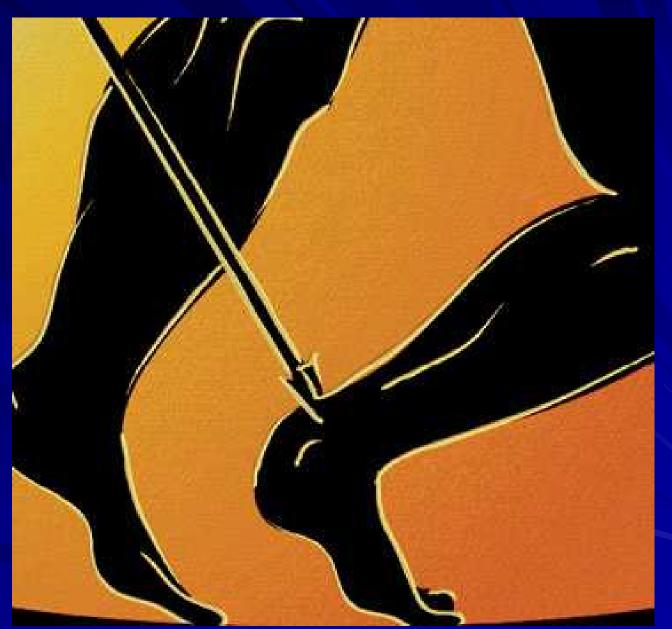


II. Animals Do not Change in the Fossil Record: Stasis Prevails

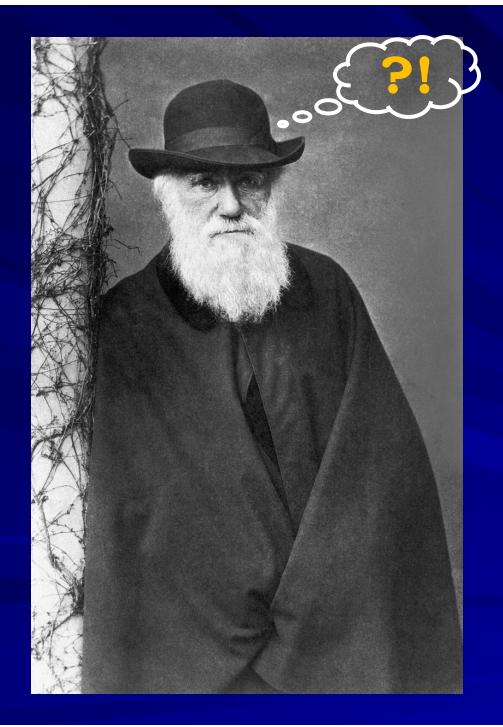
(Where are the Transitional Fossils, Intermediate Forms, or Missing Links?)



The Lack of Transitional Fossils are Darwin's Achilles Heel



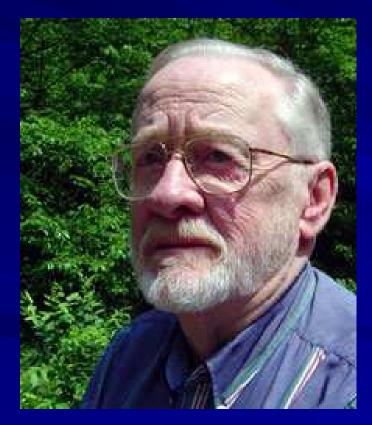
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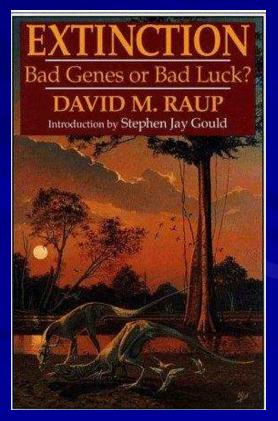


*"Why is not every* geologic formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely-graduated organic chain; and this is the most obvious and serious objection which can be urged against the theory"

- Charles Darwin, <u>The Origin</u> of Species, 1872, pp. 264, 265 "In the years after Darwin, his advocates hoped to find predictable progressions. In general, these have not been found—yet the optimism has died hard, and some <u>pure fantasy</u> has crept into textbooks."

- David M. Raup, "Evolution and the Fossil Record," *Science*, vol. 213 (July 17, 1981), p. 289 [Paleontologist, Univ. Chicago]

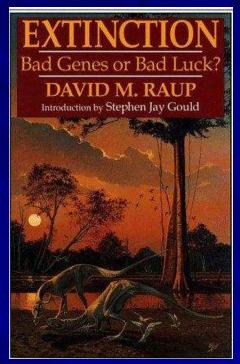




*"The record of evolution is still surprisingly jerky and, ironically, we have even <u>fewer</u> <u>examples</u> of evolutionary transition than we had in Darwin's time."* 

-Raup, David M., "Conflicts Between Darwin and Paleontology," *Bulletin, Field Museum of Natural History*, vol. 50 (January 1979), p. 25. Raup is Curator of Geology at the Field Museum of Natural History, Chicago.

WILL THEY FIND THE TRANSITIONS IN TIME?





"The history of comparative biology teaches us that the search for ancestors is doomed to ultimate failure, thus, with respect to its principal objective, this search is an exercise in futility. Increased knowledge of suggested 'ancestors' usually shows them to be too specialized to have been direct ancestors of anything else.... In contrast to what is usually stated, therefore, a more complete sample of the fossil record in itself would only complicate the problem of assessing the interrelationship of the fossil species."

-Gareth V. Nelson, "Origin and Diversification of Teleostean Fishes," Annals of the New York Academy of Sciences (1971), pp. 18-30. Nelson was in the Department of Ichthyology, American Museum of Natural History.



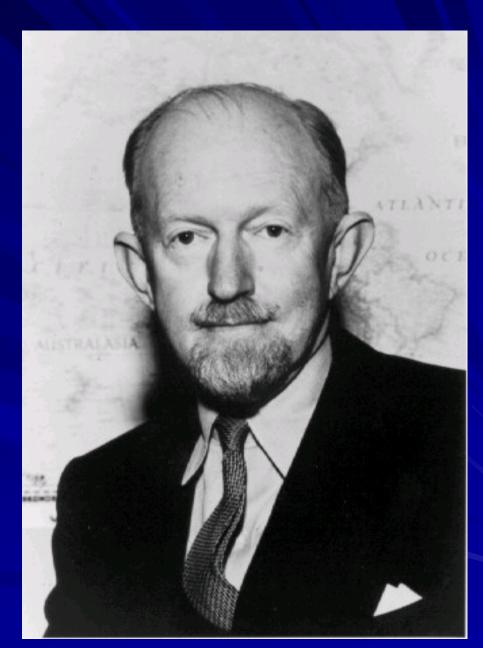


"Despite the bright promise that paleontology provides . . . it has presented some nasty difficulties for evolutionists, the most notorious of which is the presence of 'gaps' in the fossil record. Evolution requires intermediate forms between species, and paleontology does not provide them

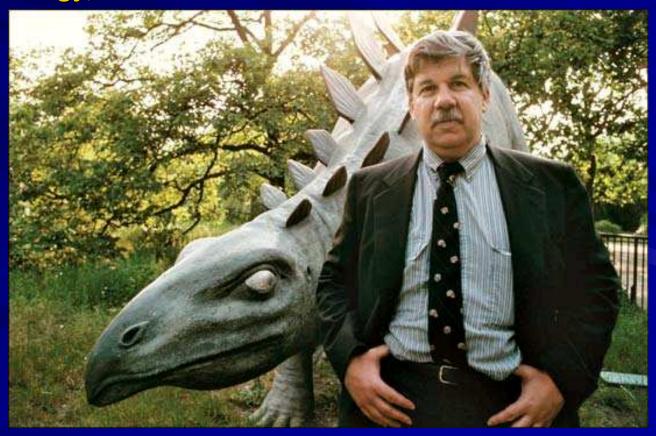
- David B. Kitts (School of Geology and Geophysics, University of Oklahoma), September, 1974, *Evolution*, p. 466.

*"The regular* absence of transitional forms is not confined to mammals, but is an almost universal phenomenon, as has long been noted by paleontologists"

- G.G. Simpson, <u>Tempo and Mode in</u> <u>Evolution</u>, 1944, p. 105



"The absence of fossil evidence for intermediary stages between major transitions in organic design. . . has been a persistent and nagging problem for gradualistic accounts of evolution . . I regard the failure to find a clear 'vector of progress' in life's history as the most puzzling fact of the fossil record" - S.J.Gould, Evolution Now, 1982, p 140 and 1980, Paleobiology, 6:119-130

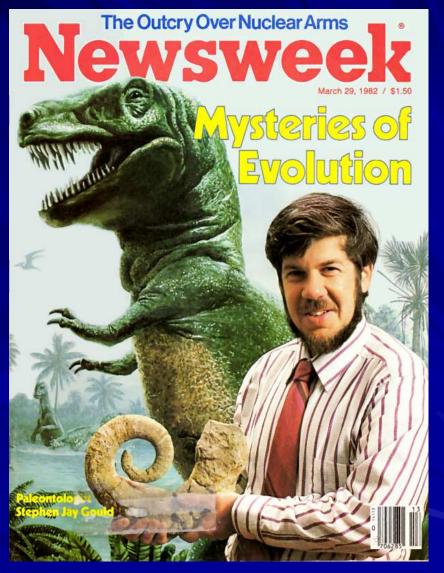


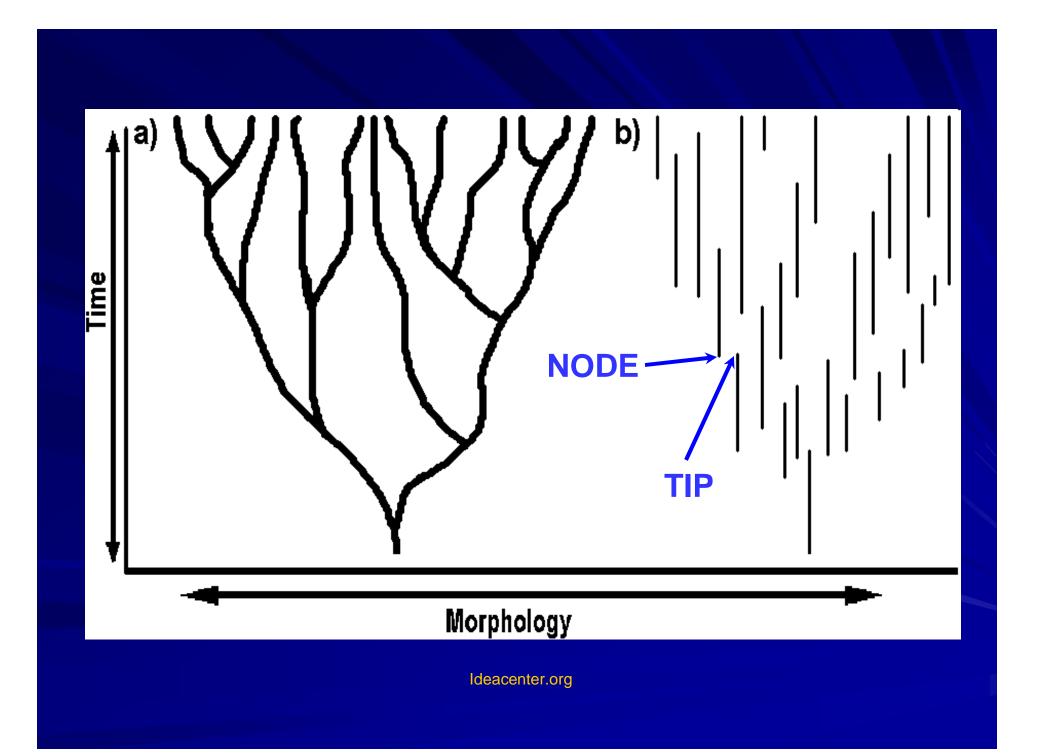
"I fully agree with your comments about the lack of direct illustration of evolutionary transitions in my book. If I knew of any, fossil or living, I would have certainly included them. . . Gould and the American Museum people are hard to contradict when they say there are no transitional fossils. . . I will lay it on the line—there is not one such fossil for which one could make a watertight argument" - Colin Patterson, (Paleontologist, British Museum of Natural History) 1979, letter to L.D. Sunderland



"The extreme rarity of transitional forms in the fossil record persists as the trade secret of paleontology, the evolutionary trees that adorn our textbooks have data only at the tips and nodes of their branches: the rest is inference, however reasonable, not the evidence of the fossils."

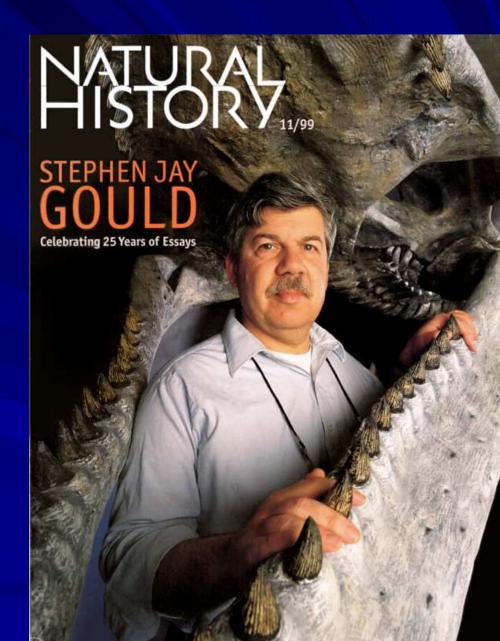
– Stephen J. Gould, *Natural History,* May, 1977, pp. 12-16





"Most species exhibit no directional change during their tenure on earth. They appear in the fossil record looking much the same as when they disappear."

Stephen J. Gould, *Natural History*, May,
1977, p. 14



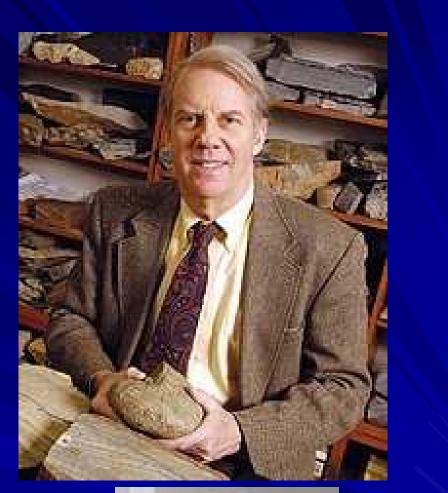
"It is, indeed, a very curious state of affairs, I think, that paleontologists have been insisting that their record is consistent with slow, steady, gradual evolution where I think that privately, they've known for over a hundred years that such is not the case.

-Eldredge, Niles, "Did Darwin Get It Wrong?" *Nova* (November 1, 1981), p. 6.



"The known fossil record fails to document a single example of phyletic evolution accomplishing a major morphologic transition and hence offers no evidence that the gradualistic model can be valid."

Stanley, Steven M., *Macroevolution: Pattern and Process* (San Francisco: W.
H. Freeman and Co., 1979), p. 39

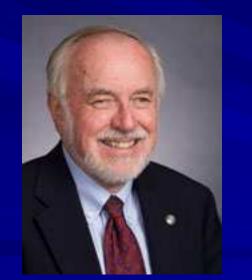


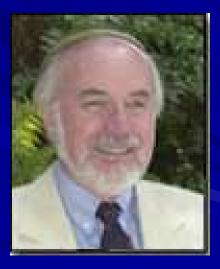


"But fossil species remain <u>unchanged</u> throughout most of their history and the record fails to contain a <u>single</u> <u>example</u> of a significant transition."

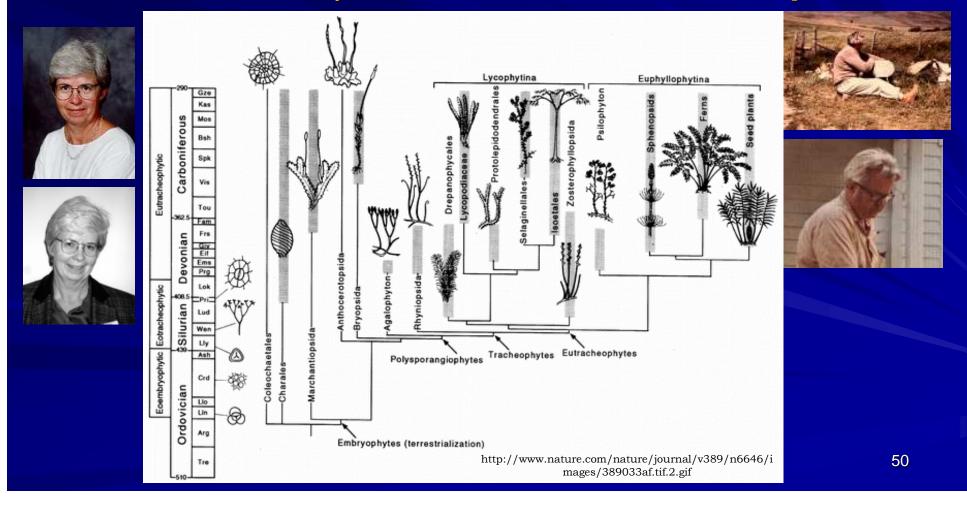
-David S. Woodroff, Univ. of CA, San Diego, Science, Vol. 208, 1980, p. 716.







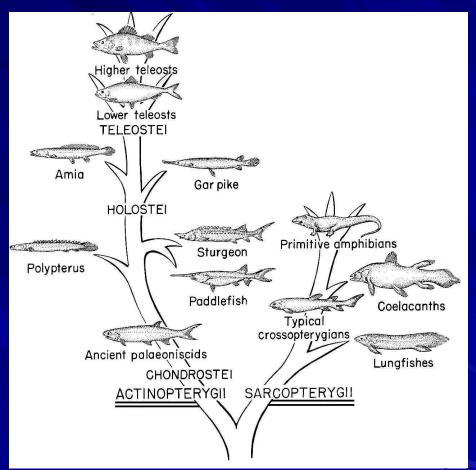
What About the Evolutionary Appearance of Terrestrial Plants?
"We still lack any precise information concerning the presumed aquatic ancestors from which land plants evolved, and the search for evidence of these precursors and of probable transitional stages continues."
Gensel, Patricia G., and Henry N. Andrews, "The Evolution of Early Land Plants," *American Scientist*, vol. 75 (September/October 1987), pp. 478-489. p. 481 [Gensel – Paleobotanist, UNC Chapel Hill; Andrews- Paleobotanist, Univ. Conn.]



### What About Evolutionary Appearance of Fish?

### "Abstract. All three subdivisions of the bony fishes first appear in the fossil record at approximately the same time. They are already widely divergent morphologically, and they are heavily armored. How did they originate? What allowed them to diverge so widely? How did they all come to have heavy armor? And why is there no trace of earlier, intermediate forms?"

- Todd, Gerald T., "Evolution of the Lung and the Origin of Bony Fishes—A Causal Relationship?" *American Zoologist*, vol. 20, no. 4 (1980), p. 757. Todd was at the University of California, Los Angeles.

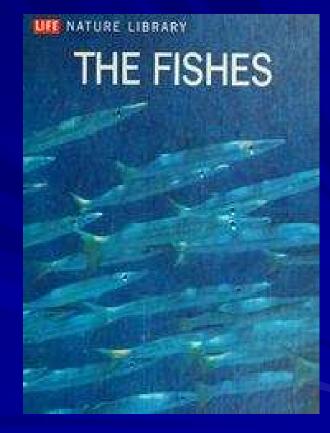


http://www.blc.arizona.edu/courses/schaffer/182/ Vertebrates/BonyFishEvol-1.jpg

### What About the Evolution of Fish?

"How this earliest chordate stock evolved, what stages of development it went through to eventually give rise to truly fishlike creatures we do not know. Between the Cambrian when it probably originated, and the Ordovician when the first fossils of animals with really fishlike characteristics appeared, there is a gap of perhaps 100 million years which we will probably never be able to fill."

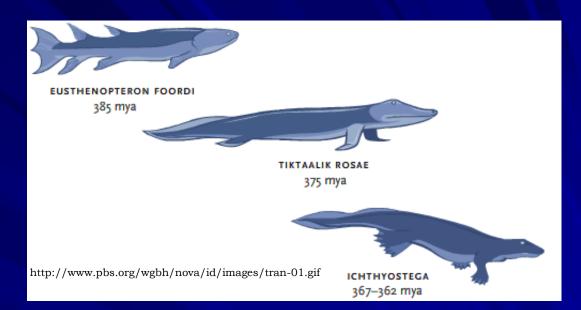
- Ommanney, F. D., *The Fishes* (New York: Time Life Nature Library, 1964), 192 pp. p. 60

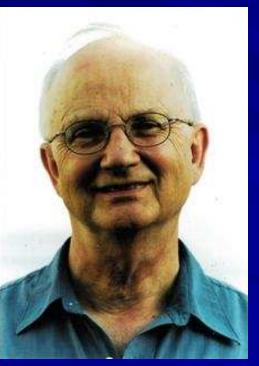


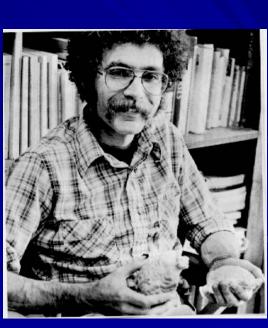
## What About Fish to Amphibian Evolution?

"No clearly intermediate form in the fish-tetrapod transition has been discovered...."

- James A. Hopson and Leonard B. Radinsky, "Vertebrate Paleontology: New Approaches and New Insights," *Paleobiology*, vol. 6 (Summer 1980), pp. 250-270. Hopson and Radinsky were in the Anatomy Department at the University of Chicago.

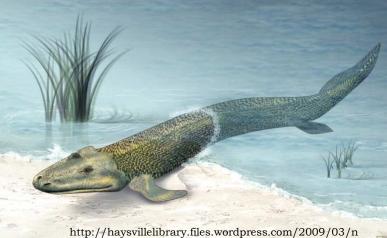






What About the Evolutionary Appearance of Amphibians? "Despite these similarities, frogs, salamanders, and caecilians are very different from one another in skeletal structure and ways of life, both now and throughout their known fossil record ... we have found no fossil evidence of any possible antecedents that possessed the specialized features common to all three modern orders.... In the absence of fossil evidence that frogs, salamanders, and caecilians evolved from a close common ancestor, we must consider the possibility that each of the modern orders evolved from a distinct group of Paleozoic amphibians."

Carroll, Robert L., *Vertebrate Paleontology and Evolution* (New York: W. H. Freeman and Co., 1988), 698 pp., pp. 181-4 [Paleontologist, McGill, Univ.]



sf-illustration-of-tiktaalik.jpg

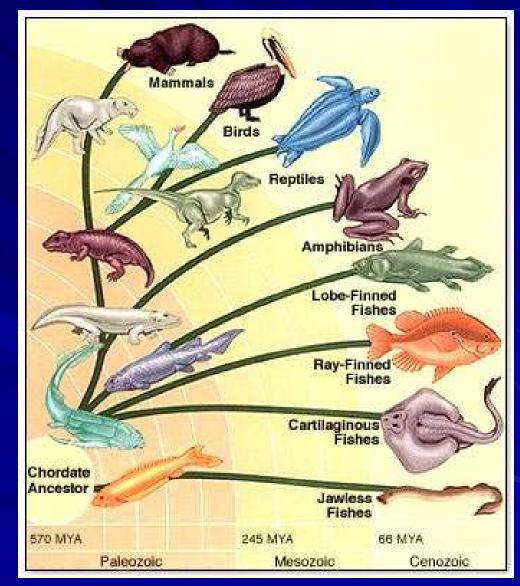




### What About the Amphibian to Reptile Transition?

"Unfortunately not a single specimen of an appropriate reptilian ancestor is known prior to the appearance of true reptiles. The absence of such ancestral forms leaves many problems of the amphibian-reptilian transition unanswered."

Lewis L. Carroll,
"Problems of the Origin of Reptiles," *Biological Reviews of the Cambridge Philosophical Society*, vol. 44 (1969). p. 393



http://www.biologycorner.com/resources/vertebrates\_evolution.jpg55

### What About the Evolution of Snakes?

"Unfortunately, the fossil history of the snakes is very fragmentary, so that it is necessary to infer much of their evolution from the comparative anatomy of modern forms."

- Colbert, Edwin H., and M. Morales, *Evolution of the Vertebrates* (New York: John Wiley and Sons, 1991), 510 pp., p. 223 [Paleontologist, Prof. Columbia Univ., American Museum Natural History, Colbert named *Staurikosaurus*,]

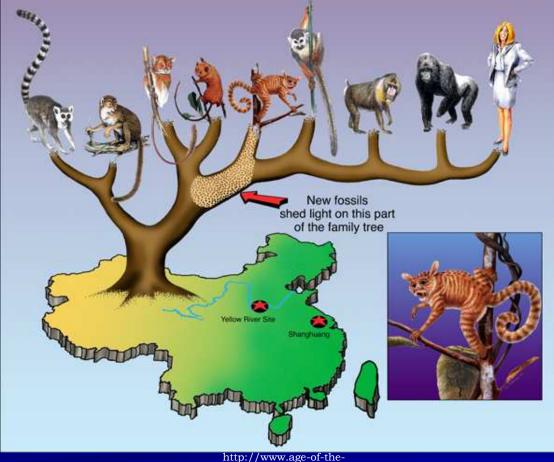




http://www.creation-vs-evolution.us/visualevolution/snake\_legs/leglessness\_in\_snakes.jpg

### What About the Evolutionary Appearance of Primates? "No specific derived characters have been demonstrated as being uniquely shared between early primates and the early members of any other order."

- Carroll, Robert L., *Vertebrate Paleontology and Evolution* (New York: W. H. Freeman and Co., 1988), 698 pp., p. 467





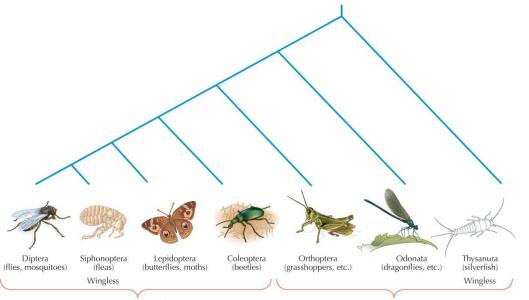


sage.org/evolution/eosimias\_human\_origins.jpg

### What About the Evolutionary Appearance of Insects? "We are in the dark concerning the origin of insects."

- Grassé, Pierre-P., *Evolution of Living Organisms* (New York: Academic Press, 1977), 297 pp. Grassé held the Chair of Evolution at the Sorbonne for 30 years, and was Editor of the 12 volume *Traite de Zoologie.*, p. 30. [French zoologist, past president of the French Academy of Sciences. Dobzhansky said that Grasse's "knowledge of the living world is encyclopedic."]





Holometabolous

Hemimetabolous

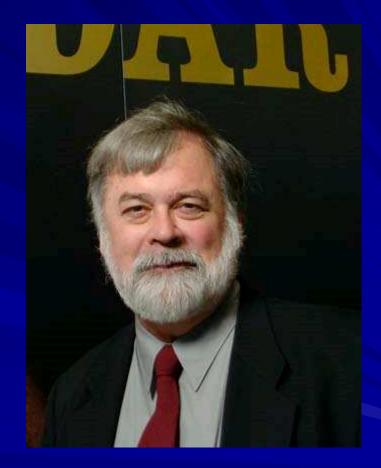
FIGURE 9.17. The phylogenetic relationship of several insect orders. Of the groups shown here, only two, the Thysanura and Siphonoptera, are wingless. Based on the fossil record and relationship to other arthropods, Thysanura are thought to have evolved from the last common wingless ancestor of all the insects shown here. Thus, Thysanura retain the wingless condition of the presumed ancestor. On the other hand, the Siphonoptera lineage is thought to have become wingless as it is nested within multiple orders of winged insects. Thus the common ancestor of fleas and flies was winged, but wings were lost in the lineage leading to fleas.

Evolution © 2007 Cold Spring Harbor Laboratory Press http://evolution-textbook.org/content/free/figures/09\_EVOW\_Art/17\_EVOW\_CH09.jpg



*"If ever there was a myth, it is that evolution is a process of constant change" –* 

- Niles Eldredge and Ian Tattersall, 1982, <u>The Myths of Human</u> <u>Evolution</u>, p. 8



## IV. The Cambrian Explosion: Every major animal phyla appears in the Cambrian layer

- All major phyla supposedly "evolved" within the first 2% of the fossil record, since then they have remained the same.

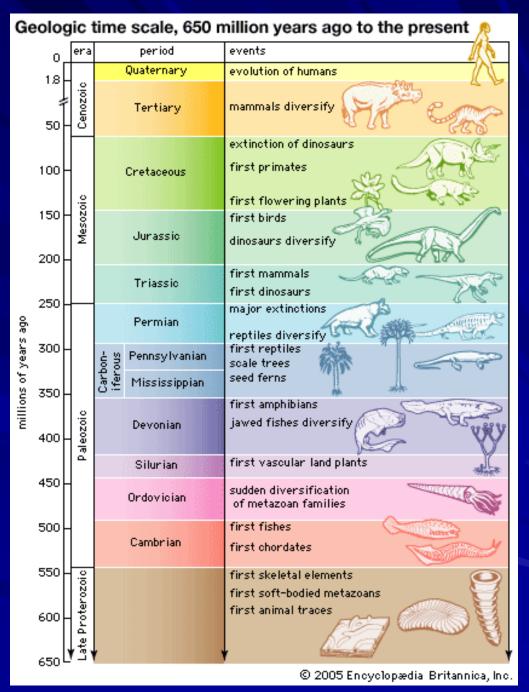
- 98% of all species that ever lived are extinct.

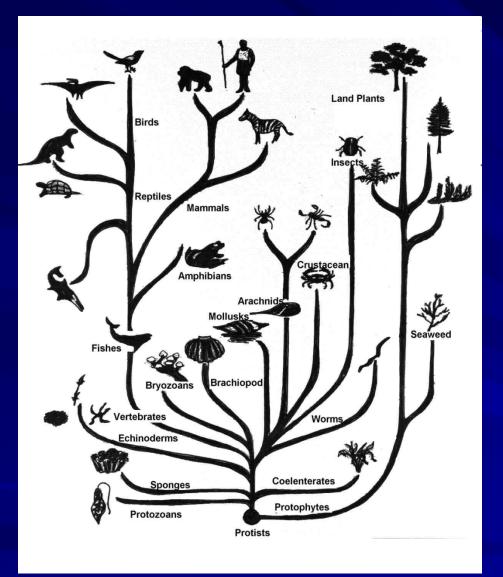
- Out of 100 Phyla that have lived, only 36 remain!

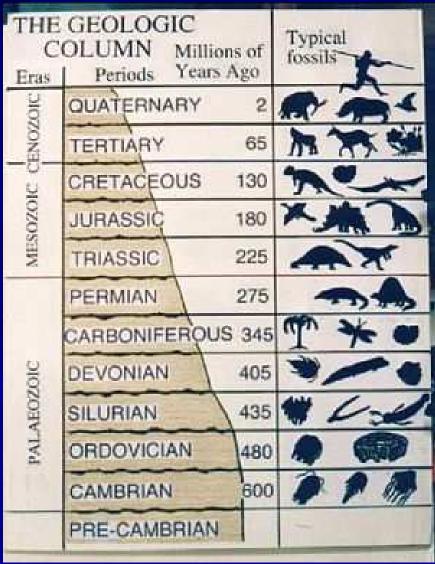


# Darwinian Interpretation of the Geologic Column

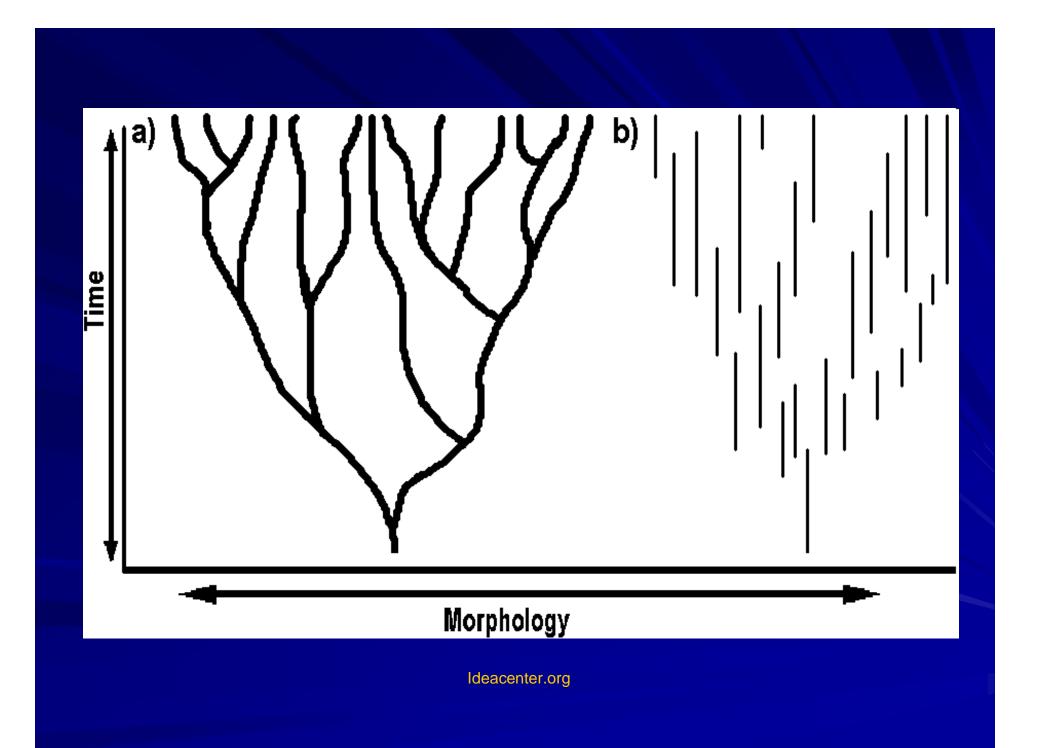
Simple phyletic groups, becoming more complex? No.

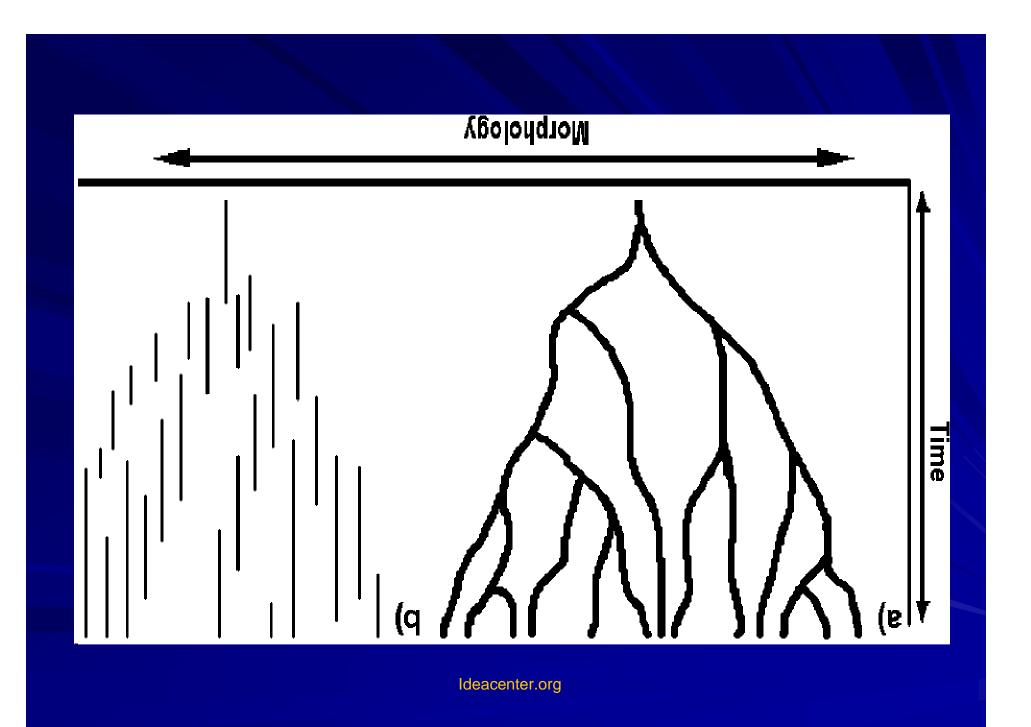


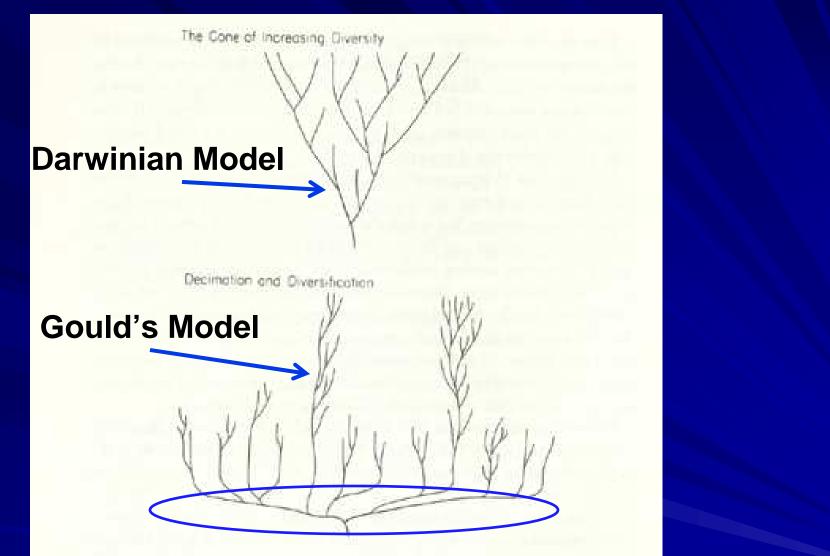




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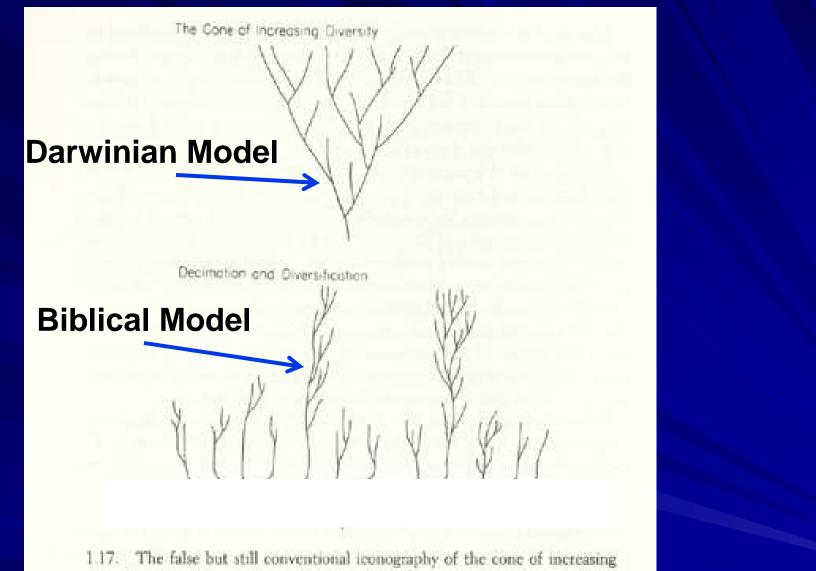






1.17. The false but still conventional iconography of the cone of increasing diversity, and the revised model of diversification and decimation, suggested by the proper reconstruction of the Burgess Shale.

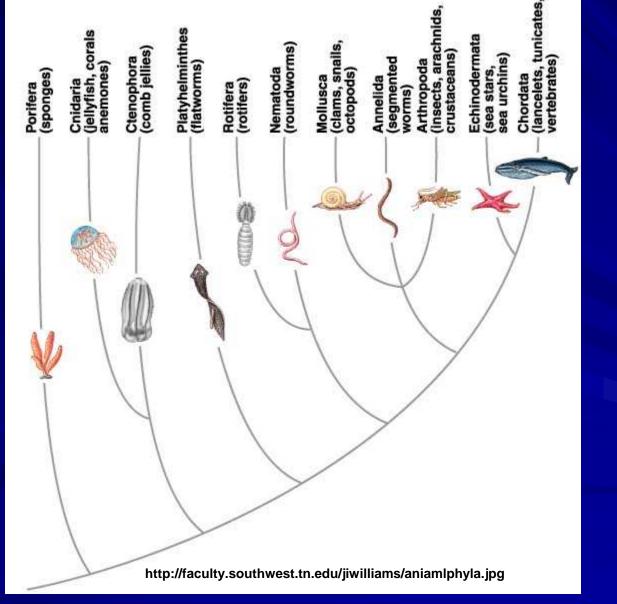
#### Stephen Jay Gould. Wonderful life. New York: W.W. Norton, 1989.



1.17. The false but still conventional iconography of the cone of increasing diversity, and the revised model of diversification and decimation, suggested by the proper reconstruction of the Burgess Shale.

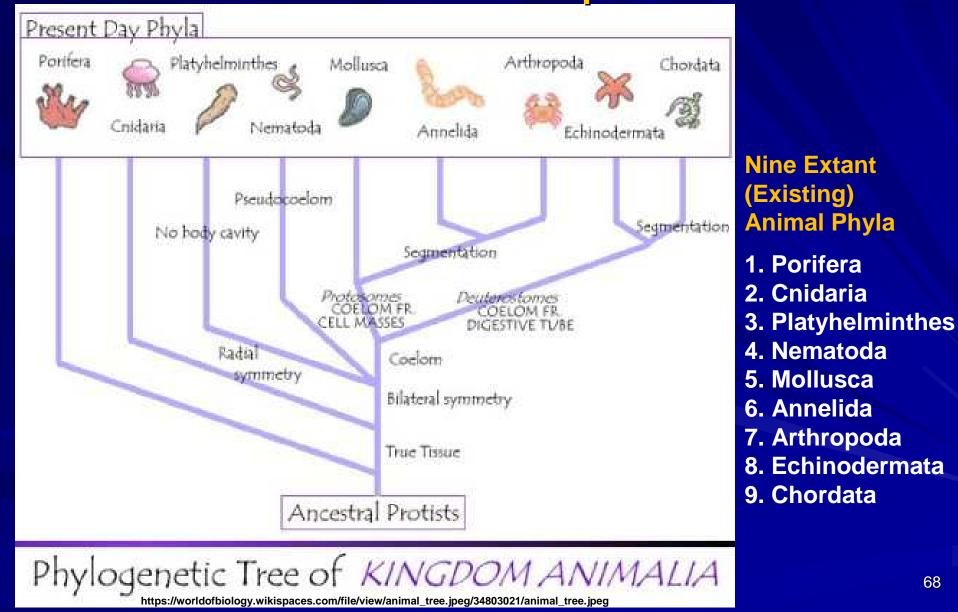
### Stephen Jay Gould. Wonderful life. New York: W.W. Norton, 1989.

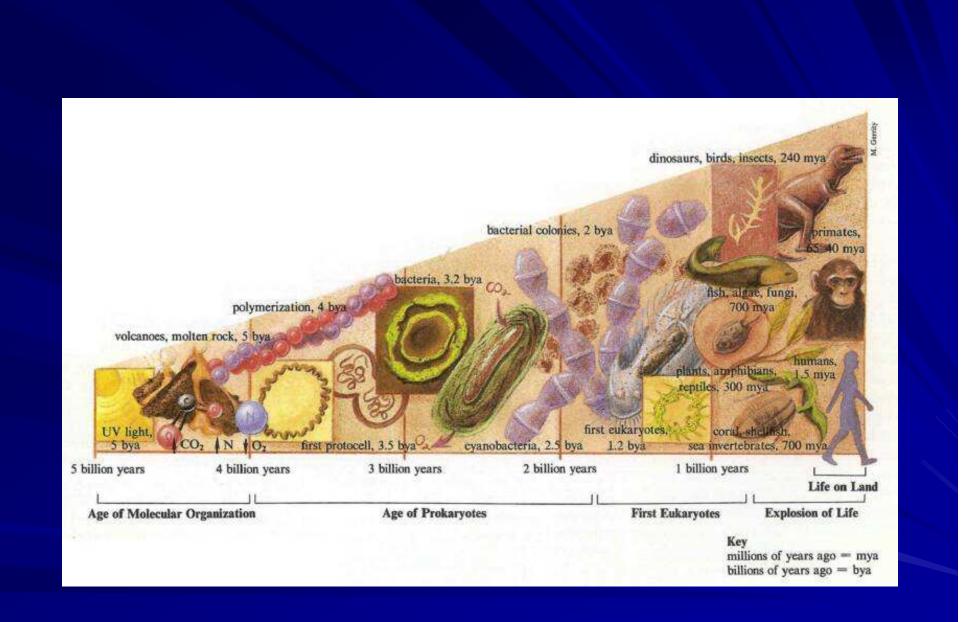
## Eleven Extant Animal Phyla that Appeared in the "Cambrian Explosion"

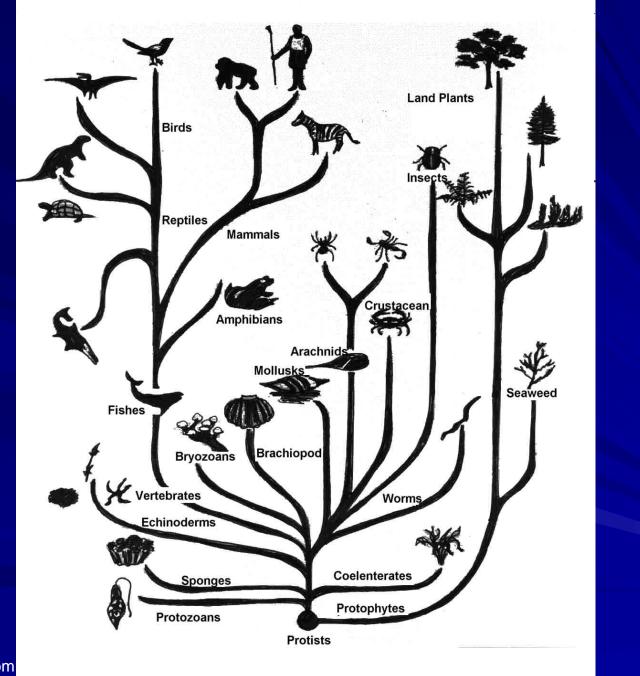


**Eleven Extant** (Existing) **Animal Phyla** 1. Porifera 2. Cnidaria 3. Ctenophora 4. Platyhelminthes 5. Rotifera 6. Nematoda 7. Mollusca 8. Annelida 9. Arthropoda **10. Echinodermata** 11. Chordata

## Nine Extant Animal Phyla that Appeared in the "Cambrian Explosion"

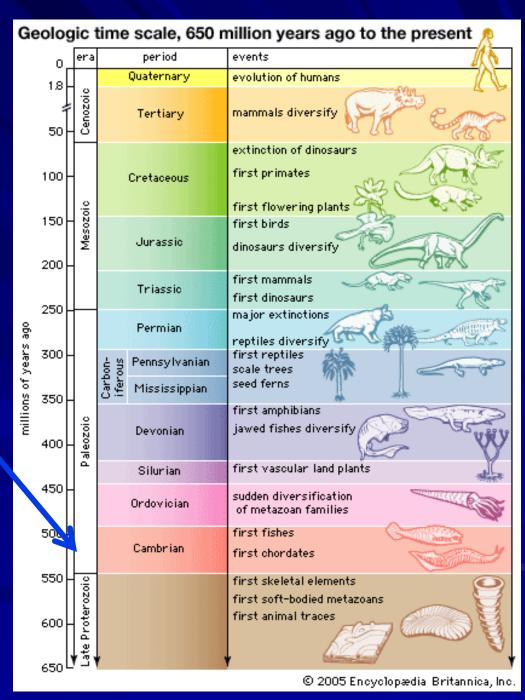






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# Where Are The Precambrian Ancestors?



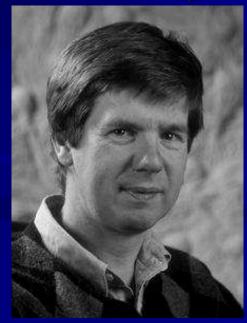
"... the Cambrian explosion established virtually all the major animal body forms— Baupläne or phyla—that would exist thereafter."

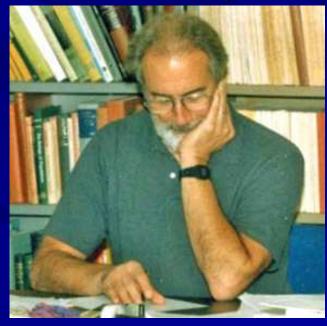
- Roger Lewin, "A Lopsided Look at Evolution," 1988, *Science*, 241:291-293 [British Anthropologist, News Editor for *Science*]

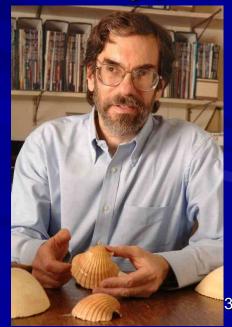


"All of the basic architectures of animals were apparently established by the close of the Cambrian explosion; subsequent evolutionary changes, even those that allowed animals to move out of the sea onto land, involved only modifications of those basic body plans. About 37 distinct body architectures are recognized among present-day animals and from the basis of the taxonomic classification level of phyla."

- Douglas H. Erwin, James W. Valentine, and David Jablonski, "The Origin of Animal Body Plans," *American Scientist*, vol. 85 (March/April 1997) [Erwin- Curator paleobiology, Smithsonian National Museum of Natural History; Valentine- U.C. Berkeley, Jablonski- U. Chicago]







"If any event in life's history resembles man's creation myths, it is this sudden diversification of marine life when multicellular organisms took over as the dominant actors in ecology and evolution. Baffling (and embarrassing) to Darwin, this event still dazzles us and stands as a major biological revolution on a par with the invention of selfreplication and the origin of the eukaryotic cell. The animal phyla emerged out of the Precambrian mists with most of the attributes of their modern descendants."

-Stefan Bengtson, "The Solution to a Jigsaw Puzzle," Nature, vol. 345 (June 28, 1990), pp. 765-766. [Expert on Cambrian Explosion, Swedish Museum of Natural History.]

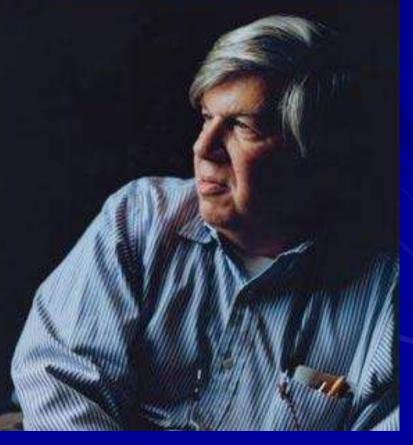




"Studies that began in the early 1950s and continue at an accelerating pace today have revealed an extensive Precambrian fossil record, but the problem of the Cambrian explosion has not receded, since our more extensive labor has still failed to identify any creature that might serve as a plausible immediate ancestor for the Cambrian faunas... Where, then, are all the Precambrian ancestors —or, if they didn't exist in recognizable form, how did modern complexity get off to such a fast start?" - Gould, Stephen Jay, "A Short Way to Big Ends," 1986, Natural History, 95:18-28.

david f. prindle

## STEPHEN JAY GOULD and the politics of evolution



Where Are The Precambrian Ancestors?

Precambrian

Phanerozoic

ont	ra Period
Cenozoic	Quaternary Tertiary
Mesozoic	Cretaceous Jurassic Triassic
Paleozoic	Permian Carboniferous Devonian Silurian Ordovican Cambrian

**Apologetics Press** 

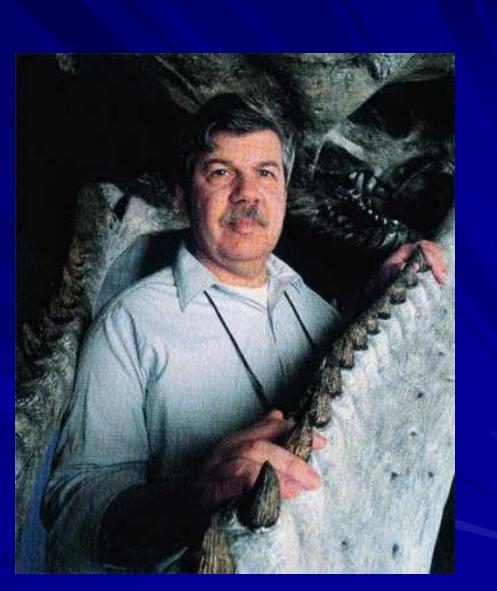
"Most paleontologists today give little thought to fossiliferous rocks older than the Cambrian, thus ignoring the most important missing link of all. Indeed the missing Precambrian record cannot properly he described as a link for it is in reality, <u>about ninetenths of the chain of life: the</u> <u>first ninetenths</u>."

- H.S. Ladd, UCLA, *Geo. So. of Am. Mem.* 1967, Vol. II, p.7

"It must be significant that nearly all the evolutionary stories I learned as a student, from Trueman's Ostrea/Gryphaea [oyster-like bivalves] to Carruthers' Zaphrentis delanouei [horn-shaped bivalve], have now been 'debunked'... The actual transition from one species to another is probably very local and sudden phenomenon, occurring only in marginal populations. Similarly, my own experinece of more than twenty years looking for evolutionary lineages among the Mesozoic Brachiopoda has proved them equally elusive. . . We all know that many apparent evolutionary bursts are nothing more than brainstorms on the part of particular palaeontologists. One splitter in a library can do far more than millions of years of genetic mutation... The point emerges that, if we examine the fossil record in detail whether at the level of orders or of species, we find-over and over again-not gradual evolution, but the sudden explosion of one group at the expense of another... But even if we cannot trace the actual transition, we can very easily see and measure the increasing numbers of species and of individuals at various levels."

- Derek V. Ager, "The Nature of the Fossil Record," *Proceedings of the British Geological Association*, 87[2]:131-159. Presidential Address, March 5, 1976.

"Most species exhibit no directional change during their tenure on earth. They appear in the fossil record looking much the same as when they disappear...a species does not rise gradually by the steady transformation of its ancestors; it appears all at once and 'fully formed'" - S.J. Gould, 1977, Natural History, 86[5]pp. 12-16

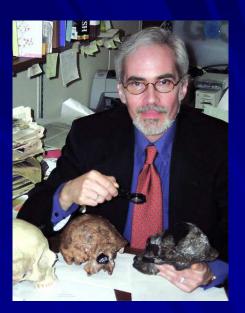


"Although paleontologists have, and continue to claim to have, discovered sequences of fossils that do indeed present a picture of gradual change over time, the truth of the matter is that we are still in the dark about the origin of most major groups of organisms. They appear in the fossil record as Athena did from the head of Zeus-fullblown and raring to go, in contradiction to Darwin's depiction of evolution as resulting

from the gradual accumulation of countless infinitesimally minute variations, which, in turn, demands that the fossil record preserve an unbroken chain of transitional forms."

- Jeffrey Schwartz [Physical Anthropologist, University of Pittsburgh, USA], "Sudden Origins: Fossils, Genes, and the Emergence of Species," John Wiley & Sons: New York NY, 1999, p.3.







"... the Cambrian strata of rocks, vintage about 600 million years [evolutionists are now dating the beginning of the Cambrian at about 530 million years], are the oldest in which we find most of the major invertebrate groups. And we find many of them already in an advanced state of evolution, the very first time they appear. It is as though they were just planted there, without any evolutionary history. Needless to say, this appearance of sudden planting has delighted creationists....the only alternative explanation of the sudden appearance of so many complex animal types in the Cambrian era is divine creation...", - Richard Dawkins, THE BLIND WATCHMAKER, 1986, p229-230



"The abrupt appearance of higher taxa in the fossil record has been a perennial puzzle. Not only do characteristic and distinctive remains of phyla appear suddenly, without known ancestors, but several classes of a phylum, orders of a class, and so on, commonly appear at approximately the same time without known intermediates.... If we read the record rather literally, it implies that organisms of new grades of complexity arose and radiated relatively rapidly." Valentine, James W., and Cathryn A. **Campbell, "Genetic Regulation and** the Fossil Record," American Scientist, vol. 63 (November/December 1975), pp. 673-680. p. 673



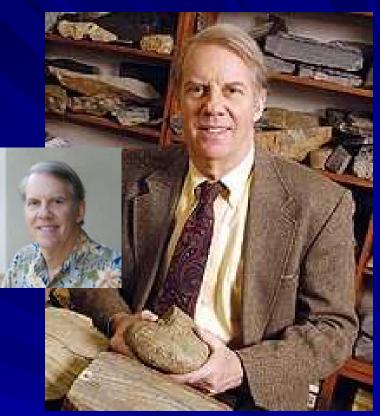
## "Bait and Switch"



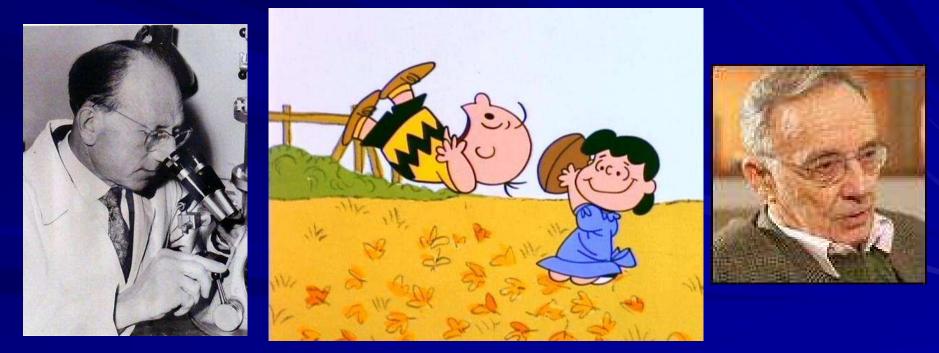
## THE FOSSIL RECORD DOESN'T PROVE EVOLUTION EITHER

### I. The Fossil Record Must Reflect Darwinism or The Hypothesis Fails: QUOTE #6

"... We must look to the fossil record for the ultimate documentation of large-scale change. In the absence of the fossil record, the credibility of evolutionists would be severely weakened. We might wonder whether the doctrine of evolution would qualify <u>as anything more</u> than an outrageous hypothesis."



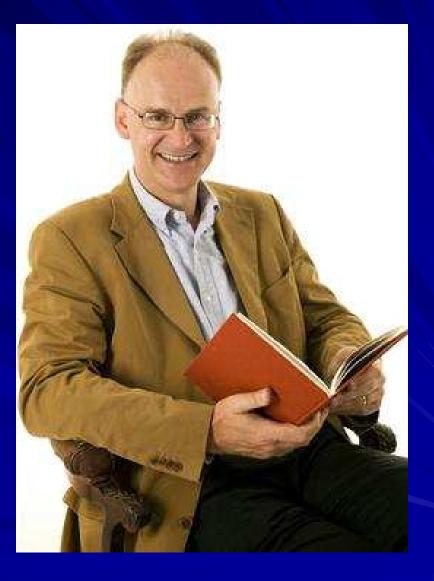
- Steven M. Stanley, <u>Macroevolution: Pattern and</u> <u>Process</u>, San Francisco: W.H. Freeman and Co., 1979 [Paleontologist, Ph.D., Yale, Taught at Johns Hopkins and U. Hawaii] 84 "Since paleontology does not shed any light on the genesis of the phyla, one must have recourse to the data drawn from comparative anatomy and embryology." Grassé, Pierre-P., *Evolution of Living Organisms* (New York: Academic Press, 1977), 297 pp. Grassé held the Chair of Evolution at the Sorbonne for 30 years, and was Editor of the 12 volume *Traite de Zoologie*.



"In any case, no real evolutionist, whether gradualist or punctuationist, uses the fossil record as evidence in favor of the theory of evolution as opposed to special creation..."

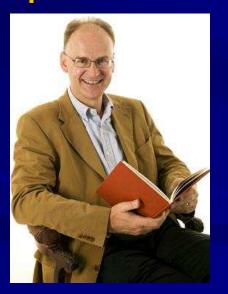
- Mark Ridley, "Who Doubts Evolution?" *New Scientist*, 90:830-832, 1981 [Dept. Zoology, Oxford Univ.]

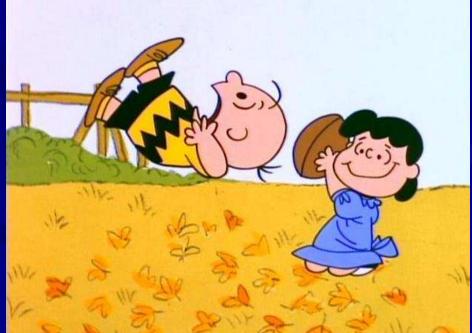




"If the creationists want to impress the Darwinian establishment, it will be no use prating on about what the fossils say. No good Darwinian's belief in evolution stands on the fossil evidence for gradual evolution, so nor will his belief fall by it."

-Ridley, Mark [zoologist, Oxford University], "Who doubts evolution?" New Scientist, Vol. 90, pp.830-832, 25 June 1981, p.832.



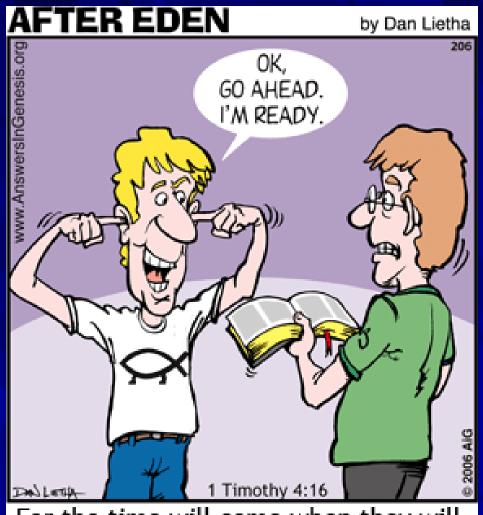




"Few paleontologists have, I think ever supposed that fossils, by themselves, provide grounds for the conclusion that evolution has occurred. An examination of the work of those paleontologists who have been particularly concerned with the relationship between paleontology and evolutionary theory, for example that of G. G. Simpson and S. J. Gould, reveals a mindfulness of the fact that the record of evolution, like any other historical record, must be construed within a complex of particular and general preconceptions not the least of which is the hypothesis that evolution has occurred... The fossil record doesn't even provide any evidence in support of Darwinian theory except in the weak sense that the fossil record is compatible with it, just as it is compatible with other evolutionary theories, and revolutionary theories and special creationist theories and even ahistorical theories." - Kitts, David B., "Search for the Holy Transformation," review of Evolution of Living Organisms, by Pierre-P. Grassé, Paleobiology, vol. 5 (Summer 1979), pp. 353-355. Kitts was Professor of History of Science, University of Oklahoma.

# Where do the Evolutionists Go From Here?

THE DOCTRINE OF PUNCTUATED EQUILIBRIUM (Saltational Evolution)



For the time will come when they will not endure sound doctrine ... And they shall turn away their ears from the truth, and shall be turned unto fables. 2 Timothy 4:3a-4b



"Since the early days of the acceptance of the standard geologic column, fossils have been turning up in 'wrong' places as more and more fossils have been collected, and this process continues to this very day"

- J. Woodmorappe, *Creat. Ex Nihilo Tech. J.*, 2000, 14:110-116

#### **Out of Place Fossils**

1. Flatworms (phylum *Platyhelminthes*) (First appear higher than expected) 2. Dasycladalean algae (Lower than expected) 3. Pipiscids (Carboniferous animals lately found in the Cambrian strata) (Lower) 4. Agnathan (jawless) fish (Lower) 5. Lystrosaurus reptile (Lower) 6. *Neoguadalupia* sponge (Lower) 7. Camptochlamys bivalve (Lower) 8. Parafusus gastropod (Lower) 9. Vertebral fish found in early Cambrian strata (Lower) (1): Zhang, X.G., and X.-G. Hou. 2004. Evidence for a single median fin-fold and tail in the lower Cambrian vertebate. J. Evolution. Biol. 17:1162-1166. (2) Chen, J-Y., Hang, D-Y., and Li, C.W. (December 1999). "An early Cambrian craniate-like chordate". Nature 402: 518–522.

