

Is evolution the best explanation of the evidence?

Naturalists say YES!



Critics say NO!

1. **The fossil record**
2. **Genetics**
3. **Laws of nature**

Francis Collins

"The molecular support for the theory of evolution has convinced virtually all working biologists that Darwin's framework of variation and natural selection is unquestionably correct."

Michael Denton (molecular biologist)

"Evolution is still, as it was in Darwin's time, a highly speculative hypothesis entirely without direct factual support."

Richard Leakey (paleontologist)

"If you brought in a smart scientist from another discipline and showed him the meager evidence we've got, he'd surely say, 'Forget it, there isn't enough to go on.'"

Phillip E. Johnson (Law professor)

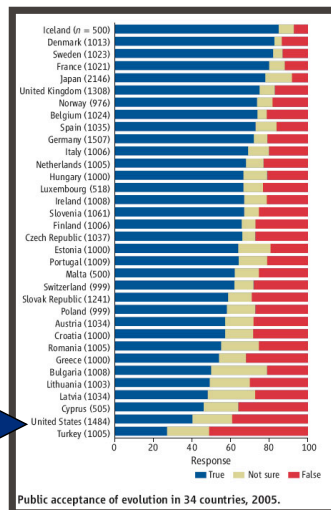
"I am not a trained scientist, I am a law professor. I understand rational argumentation and when I hear arguments that are irrational, I start to poke around."

Proverbs 18:13

"He who gives an answer before he hears, it is folly and shame to him."

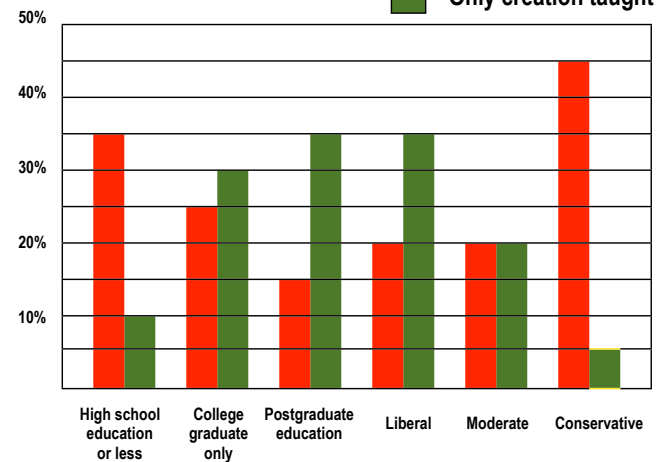
Views of evolution by country

Most people in the USA do not believe that macro evolution is a scientific fact.



Would you be upset if . . .

Only evolution taught
Only creation taught

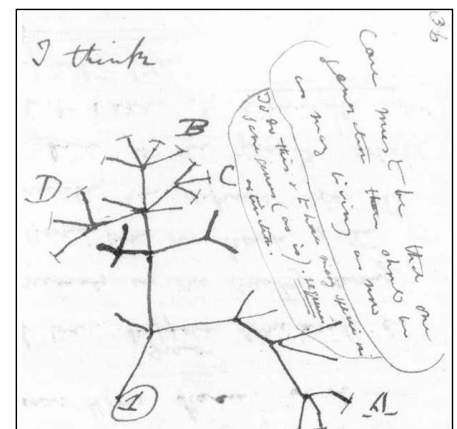
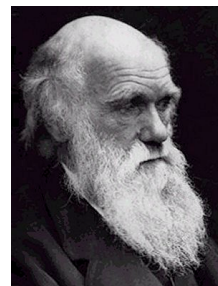


Fossil Record (paleontology)

What evolutionary theory would suggest we see in the fossil record.

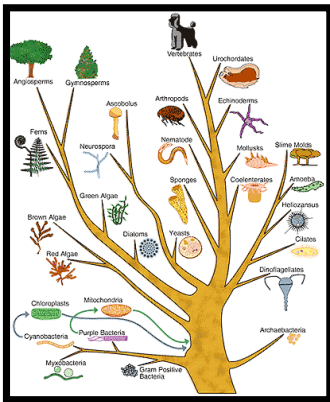
- Gradual change toward more complexity and diversity over time (as seen from lower geological strata to upper).
- Transitional forms between major phyla (kinds of life).
- A phylogenetic tree should emerge as we acquire more data.
- Simple singular forms of life evolving to many complex forms.

Darwin believed that the fossil record would either prove or disprove his theory.

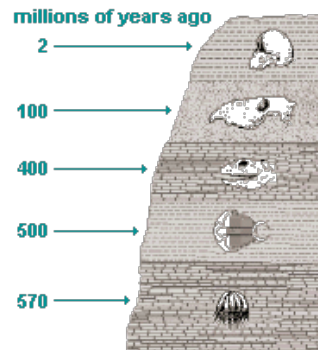


Notes from Darwin's field journal

Phylogenetic tree



Fossils and geological strata



Facts about the fossil record

Vertebrate fossils are rare. Of all fossils:

- 95% come from shallow marine invertebrates (shellfish)
- 4.75% are algae and plants
- .2375% are insects and other invertebrates
- .0125% are vertebrates (fish, reptiles, birds, mammals)
- .000125% are more than a single bone

Rapid burial - through some catastrophe

Distribution - through all layers of sediment

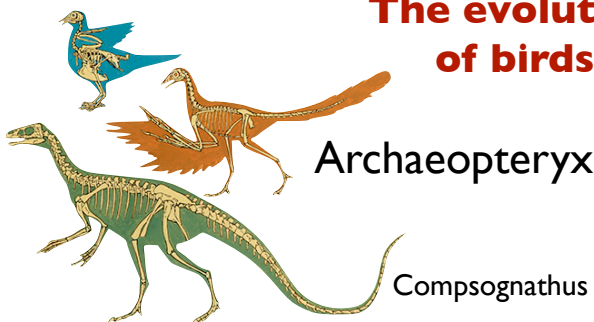
Cambrian explosion - all basic phyla appear fully formed

Stasis - links within but not between phyla

Fully formed - from beginning to end of appearance

Modern bird

The evolution of birds



Colin Patterson

(Department of The Natural History Museum in London - Archaeopteryx care taker)

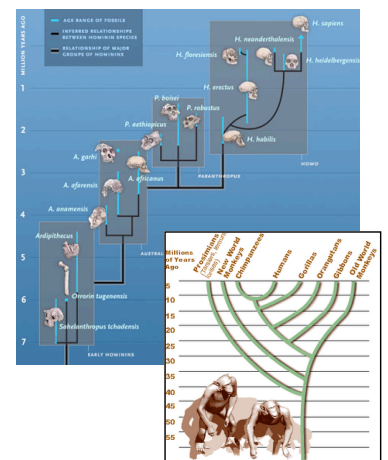
"I will lay it on the line—there is not one such fossil (which is ancestral or transitional) for which one could make a watertight argument. The reason is that statements about ancestry and descent are not applicable in the fossil record. Is *Archaeopteryx* the ancestor of all birds? Perhaps yes, perhaps no: there is no way of answering the question."

RICHARD DAWKINS.NET
THE OFFICIAL RICHARD DAWKINS WEBSITE
A CLEAR-THINKING OASIS

"Here is the kind of phylogenetic tree that is made when we scale the appearance of fossils over time with ancestral humans."

"The intermediates are still there, they are just compressed into fewer generations."

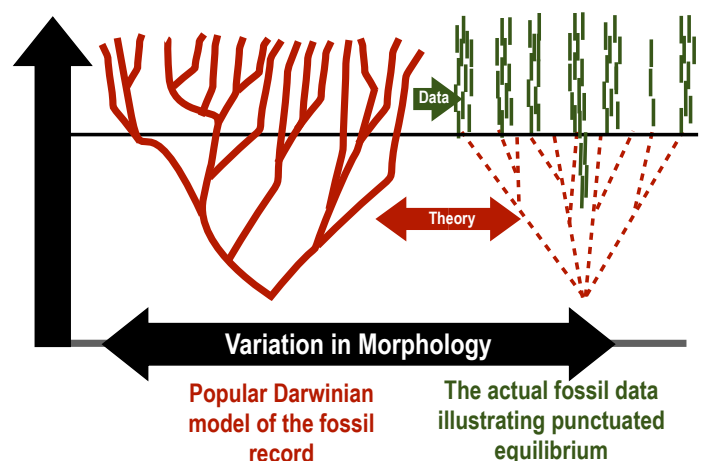
(this is why we see no transitional forms)

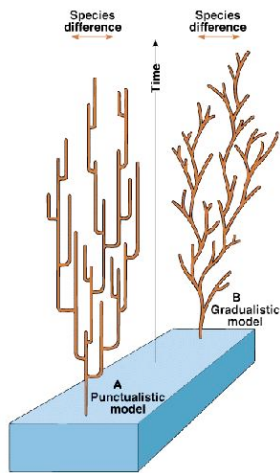


The history of most fossil species includes two features inconsistent with gradualism:

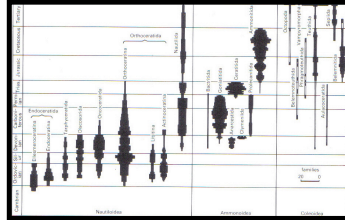
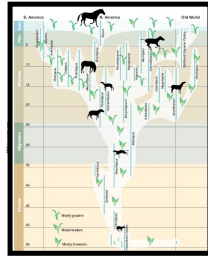
1. **Stasis.** Most species exhibit no directional change. They appear in the fossil record looking much the same as when they disappear.
2. **Sudden Appearance.** In any local area, a species does not arise gradually by the steady transformation of its ancestors; it appears all at once and 'fully formed'. 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 fossils.

Steven J. Gould "Evolution's Erratic Pace," Natural History. Vol.5, 1977





The fossil record of horses



The fossil record of cephalopods

Niles Eldredge (Paleontologist)

"We paleontologists have said that the history of life supports the story of gradual adaptive change knowing all the while it does not."

Charles Darwin

"The number of intermediate varieties, which have formerly existed on the earth, (must) be truly enormous. Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely graduated organic chain; and this, perhaps, is the most obvious and gravest objection which can be urged against my theory."

"Why, if species have descended from other species by insensibly fine gradations, do we not everywhere see innumerable transitional forms? Why is not all nature in confusion instead of the species being, as we see them, well defined?"

Steven J. Gould (paleontologist)

"We can tell tales of improvement for some groups, but in honest moments we must admit that the history of complex life is more a story of multifarious variation about a set of basic designs than a saga of accumulating excellence."

Richard Milton (Science journalist)

"It was the absence of transitional fossils that first made me question Darwin's idea of gradual change. I realized, too, that the procedures used to date rocks were circular. Rocks are used to date fossils: fossils are used to date rocks. From here I began to think the unthinkable: could Darwinism be scientifically flawed?"



Fossil Record (paleontology)

Challenges to the evolutionary theory from the fossil record.

- **Stasis** - Where are all the missing links?
- **Cambrian explosion** - Where is the gradual development over time?
- **Circular reasoning** - How do you date fossils?
- **Differentiation of life forms** - Why are all life forms so distinct and stable?

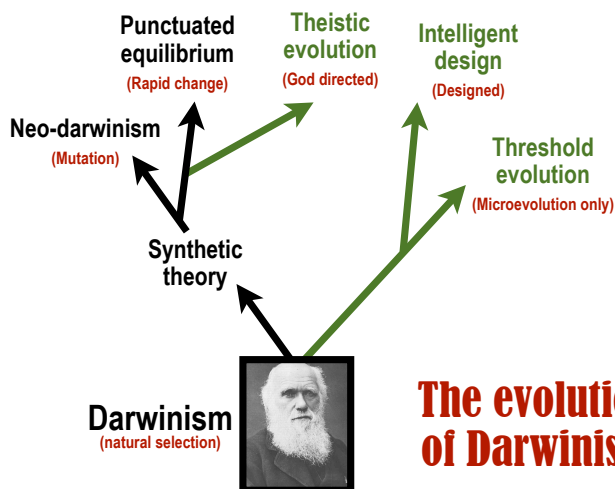


Fossil Record (paleontology)

How evolutionary advocates respond.

We have reason to make assumptions without hard evidence.

- There is solid support for evolution in microbiology enabling us to make assumptions about fossils without hard fossil data.
- Physical similarities are evidence of common ancestry.
- Transitional forms represent rapid change leaving no fossils.
- The Cambrian explosion is "a puzzle but not a problem."



The evolution of Darwinism

Information (microbiology)

Bernard-Olaf Koppers (natural philosopher)

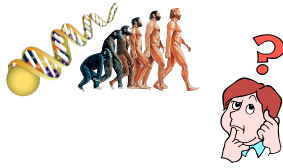
"The problem of the origin of life is clearly basically equivalent to the origin of biological information."

What evolutionary theory would suggest we see in the living cell.

- Observations in microevolution (breeding experiments) will over time produce major changes (macroevolution).
- Genetic mutations & natural selection produce new molecular information that results in morphological changes.
- We can assume that this works because of the fossil evidence.

Similar morphology and DNA - design or descent?

Similar forms =
Common Descent



Form follows Function



The origin of new genetic information is a necessary step in macroevolutionary theory.

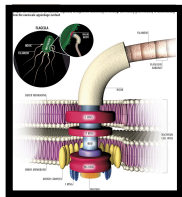
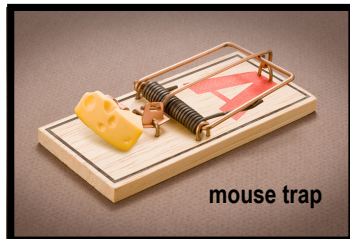
But its origin is a mystery in that natural selection and mutation tend to weed out information but do not create new information.

DNA data

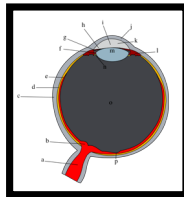
- A parent and child share 99.5% of the same DNA.
- We share 40-50% of our DNA with cabbages.
- Humans share 98% of their DNA with chimpanzees.
- Every human on earth shares 99% of their DNA with every other human.
- Identical twins share the exact same DNA.
- We share 60% of our DNA with a fruit fly.
- We share 50% of our DNA with bananas.
- Researchers at Cambridge University are convinced that the mud worms not only share DNA with humans but that they are also our closest invertebrate relatives.

Irreducible complexity

Some life forms seem to have no practical function until they are fully developed.



bacterial flagellum



eye



watch

Dr. George Sim Johnson

“Human DNA contains more organized information than the Encyclopedia Britannica. If the full text of the encyclopedia were to arrive in computer code from outer space, most people would regard this as proof of the existence of extraterrestrial intelligence, but when seen in nature, it is explained as the workings of random forces.”

Michael J. Behe (Biologist)

“The question for evolution is not whether you can take a mousetrap and use its parts for something else; it’s whether you can start with something else and make it into a mousetrap.”

Franklin M. Harold (Biochemist)

“We should reject, as a matter of principle, the substitution of intelligent design for the dialogue of chance and necessity; but we must concede that there are presently no detailed Darwinian accounts of the evolution of any biochemical system, only a variety of wishful speculations.”

Richard Dawkins

“You don’t need to be mathematician or a physicist to calculate that an eye or a hemoglobin molecule would take from here to infinity to self-assemble by sheer luck.”

“Biology is the study of complicated things that give the appearance of having been designed for a purpose.”

Sir Fred Hoyle (Founder of the Cambridge Institute of Theoretical Astronomy)

“The chance that higher life forms might have emerged in this way is comparable with the chance that a tornado sweeping through a junk yard might assemble a Boeing 747 from the material therein.”

Charles Darwin

“To suppose that the eye, (with so many parts all working together) . . . could have been formed by natural selection, seems, I freely confess, absurd in the highest degree.”

“If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous successive slight modifications, my theory would absolutely break down.”

Information



How evolutionary advocates respond.

We can make certain assumptions based on the fact that we know natural descent is established by other disciplines - fossil record.

- Mutations add and take away information (parts) on a grand scale that is guided by natural mechanisms that have not as yet been identified.
- There is built into nature an “anthropic principle” that selects for those traits that make for life as we know it.
- Information vital to life could have been imported to our planet from life in another universe that had different laws of physics.