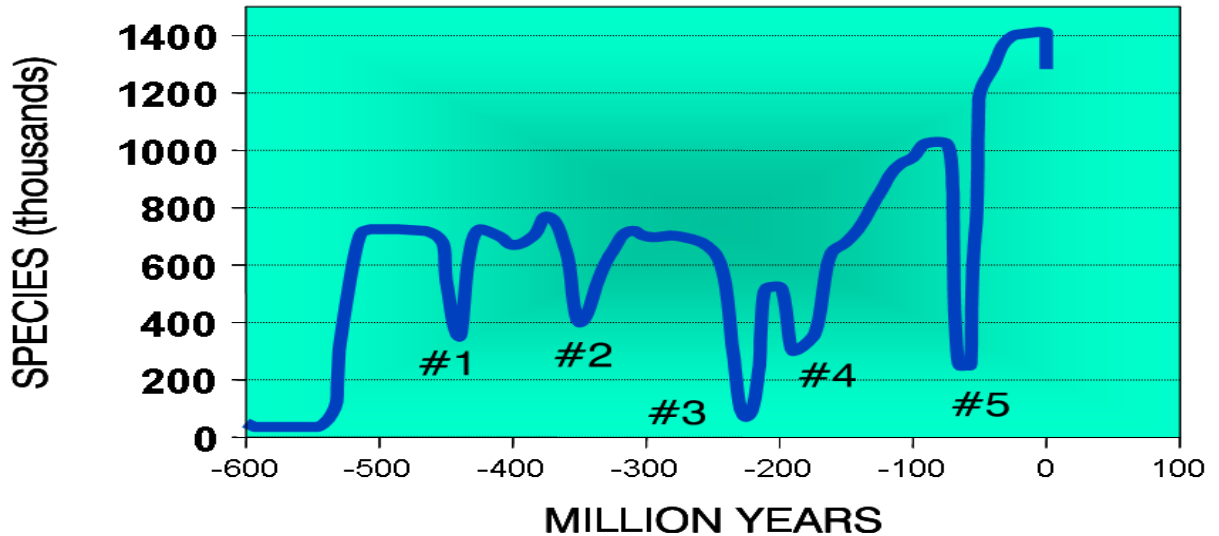


Charts & notes from our discussion:

Criteria #1- Sudden Leaps.

“Natura non facit saltum (Nature does not make leaps) ...for natural selection acts only by taking advantage of slight, successive variations; she can never take a great and sudden leap, but must advance by short and sure, though slow steps.” ¹

5 MASS EXTINCTIONS



Each mass extinction is characterized by **both** a sudden drop and a sudden rise “a Radiative Explosion” in more than ½ the number of species. So each extinction reduces the number of “Darwinian Species by ½ X 1/2 or ¼.. The record shows 5 mass extinctions, so after the 5th mass extinction the number of Darwinian Species “ left is (1/4)⁵

Darwin’s theory **fails on criteria # 1 since the Percentage of Species That Fit Natural Selection is less than 0.1%**

Current paleontological data clearly supports sudden major extinctions followed by jumps in the creation of large numbers of new species. Nature clearly does make large jumps that are followed by long periods of relative stability. This new set of observations has been called “Punctuated Equilibrium” by Eldridge & Gould. ²

Criteria #2 – Radiative Explosions.

Referring to Darwin’s criteria #2:

¹ Charles Darwin, page 184.

² Michael Benton, “Four Feet on the Ground”, *The Book of Life*, Stephen J. Gould, Ed. (New York: W. W. Norton & Co., 1993), page 100.

*“...If numerous species, belonging to the same genera or families, have really started into life at once, the fact would be **fatal to the theory** of evolution through natural selection.”*

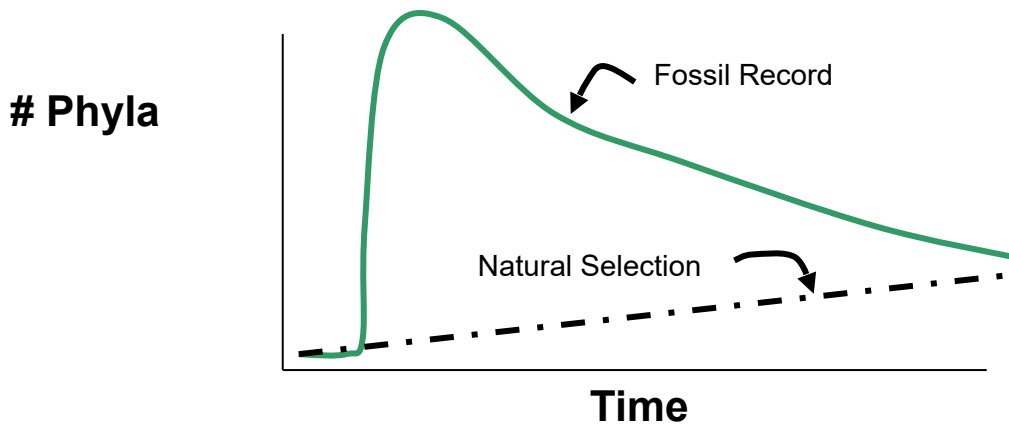


Fig. 6.2 Loss of Phyla Since Cambrian Explosion

Another major problem with the theory of Natural Selection is the theory's inability to predict correctly how the number of phyla would change during the last 600 million years. According to the theory of Natural Selection, we would expect that the number of Phyla (kingdoms, phyla, classes, orders, families, genera, species) to increase gradually over time, as shown in fig. 6.2. The maximum number of phyla would be reached today. The fossil record shows a completely different picture. The number of phyla peaked during the Cambrian Explosion at a number estimated between 70 and 100, and gradually decreased to today's number of between 28 and 35 phyla as shown in fig. 6.2.^{3, 4}

Today's fossil record repeatedly shows that:

“...numerous species, belonging to the same genera or families, have really started into life at once...”

Hence, Darwin would regard today's fossil record as

*“... **fatal to the theory** of evolution through natural selection.”*

Darwin's theory **fails on criteria #2.**

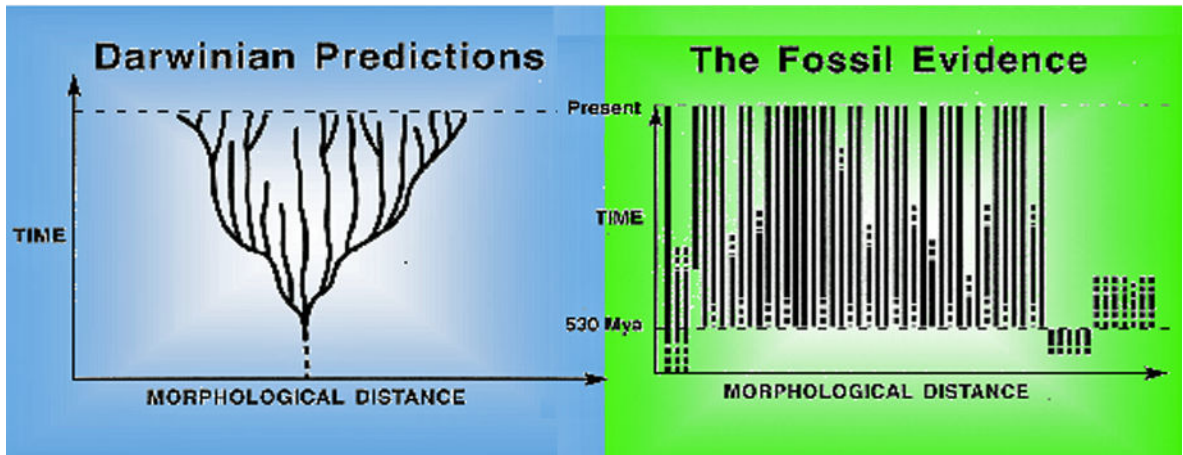
Criteria #3 – Cambrian Phyla.

Referring to Darwin's criteria #3:

*“...whole groups of species ...have been **abruptly developed** ... would be **fatal to my views.**”*

³ *Rare Earth*, P. Ward and D. Brownlee, (New York: Copernicus, Springer-Verlag New York, Inc.2000), pages 141 & 142.

⁴ (get reference for 70, get reference for fossil record)



Since this is precisely what is observed for most of the phyla in the extensive fossil record of the Cambrian Explosion,

Darwin's theory **fails on criteria #3.**

Criteria #4 Lack of *Transitional Links*

The number of intermediate and transitional links, between all living and extinct species, must have been inconceivably great." (Ref. *The Origin...* pg xx)

"He who rejects this view of the imperfection of the geological record, will rightly reject the whole theory. For he may ask in vain where are the numberless transitional links which must formerly have connected the closely allied or representative species, found in successive stages of the same great formation?" (ref. *The Origin...* pg.343.)

Darwin acknowledges that his theory was opposed by the paleontological and geological authorities of his day:

*-that, though we find in our geological formations many links between the species that now exist, and which formerly existed, we **do not find** infinitely numerous fine transitional forms closely joining them all together.*

-the sudden manner in which several species first appear in our European formations;

*-the almost entire absence, as at present known, of formations rich in fossils beneath the Cambrian strata, are all undoubtedly of the **most serious nature**. We see this in the fact that the **most eminent paleontologists**, namely, Cuvier, Agassiz, Barrande, Picas, Falconer, E. Forbes etc. and **all our greatest geologists**, as Lyell, Murchison, Sedgwick, etc., have unanimously, often vehemently maintained the immutability of species."⁵*

Thus, we see that the theory of Natural Selection **fails on all four of Darwin's criteria** for rejection of

⁵Charles Darwin, *The Origin of Species* (New York: Signet Classic, 2003), page 318

his theory.

Uniformitarianism

Another major weakness in his theory is that it is based on Uniformitarianism, which rules out any significant geological or biological catastrophes on a planetary scale- nature does not make leaps.

In view of current scientific knowledge, it would be appropriate to change from Darwin's phrase "***Natura non facit saltum***" to **Natura ~~non~~ facit saltum**

since leaps or jumps are so common in today's scientific theories.

Quantum Mechanics and its subsequent explanation of the packetization of all electromagnetic radiation is based upon quantum leaps from one energy state to another within the electronic structure of the atom.

When a star the size of our sun begins to run low on its hydrogen fuel, it burns more helium, and "jumps" to the new state of a Red Giant, with the surface of the Sun expanding its size to include the orbit of the Earth. If a star is more than 3 times the mass of our Sun, it can suddenly explode into a supernova, leaving behind a newly created black hole at its center. In the theory of the "Big Bang," the entire universe leaps into existence 13.7 billion years ago.

21st century science certainly is **not consistent with Darwin's Criteria #3**, which describes all the changes in nature as: "*...short and sure, though slow steps.*"

Based on Darwin's own criteria for the falsification of his theory, if Darwin were **alive today**, he **would not believe in his theory** of Natural selection