

E. THE EVIDENCE FROM PALEONTOLOGY (FOSSILS)

1. The Argument Stated

"The word palaeontology means literally the science of ancient life. Practically, it is the study of the fossil remains of extinct animals and plants, including any traces of their existence, such as footprints, impressions in slate, clay, or coal. The evidence from the fossils has definite elements of strength in that it deals with actual organisms that formerly inhabited the earth's surface. Many of these species must have left descendants, some of which are doubtless living in a modified condition today. Palaeontology should be able either strongly to support or to contradict the idea of evolution. If its data accord with the evolution idea and are opposed to the special creation idea, the fossils may be said to be evidences of evolution." (H. H. Newman)

"The primary and direct evidence in favour of evolution can be furnished only by palaeontology. The geological record, so soon as it approaches completeness, must, when properly questioned, yield either an affirmative or a negative answer: if Evolution has taken place there will its mark be left; if it has not taken place there will be its refutation." (Thomas H. Huxley)

"Fossils provide one of the strongest lines of evidence to support the theory of organic evolution. . . . The older rocks contain the remain, of organisms which differ considerably from living forms, and younger rocks contain fossils that appear to be more closely related to the plants and animals that are living today. This succession of fossils clearly indicates that life has slowly evolved from a few simple ancestors to the many different types of organisms that inhabit the earth today." (William H. Matthews III)

"Fragmentary though the fossil record is, it is striking that it gives clear testimony to the fact of evolution, and considerable detail can be worked out in many lines of descent. The most ancient fossils include only invertebrates. Then primitive fish-like vertebrates appear, and these gradually blend into true fishes, similar to some species now living. Later, amphibians and reptiles appear in the fossil record, and birds and mammals finally appear quite late. Thus the simplest animals appear in the most remote geological eras, while the most complex appear late in geological history. In most major groups (order, class, and phylum), there is marked change from one geological period to the next, but always a particular fauna resembles that of another period near it in time more closely than it does that of any other period remote from it in time. Finally, the fossils of recent organisms blend into our present living flora and fauna, with often the same genera and even the same species being represented." (Edward O. Dodson)

"The only possible direct evidence for a specific line of descent is a series of fossils leading stepwise from an ancestral to a