

Darwin: Evolution by Natural Selection and Evidence of Evolution
Chapter 16, 19.1, a bit of 19.2 and 19.3

Evidence of Evolution:

1. The Fossil Record (composed of physical remains of organisms)
2. Geologic Distribution of Living Species (indicates common ancestral species)
3. Homologous Body Structures (implies similar genes)
4. Similarities in Early Development (implies similar genes)
5. Molecular Biology (similar nucleotides (DNA) and amino acid (protein sequences) -(implies common ancestry and relatedness of species).

The Fossil Record:

By following the fossils from bottom to top, one can “see” evolution. Single-celled organisms evolved into marine invertebrates, in turn, evolve into fish. The fish eventually produce amphibians and then reptiles, which give way to birds and mammals and finally man. Surely, evolutions true if fossils are arranged in such an order. Furthermore, each basic body style (phylum) has been present right from the start. In the lowest level of abundant multi-celled organisms, the Cambrian Period, fossils of each phylum have been found, including vertebrates! Many fossil organisms are found in the Fossil Record which have gone extinct.