

BIOLOGY

Scope of Biology. Biology, dealing with plants and animals, has, like most of the other Natural Sciences, developed in different directions. In its many-sidedness, it embraces several more or less distinct sub-sciences. These include *Morphology*, dealing with the structural characters (*Anatomy* with the grosser structures, and *Histology* with the minute microscopic structure); *Ecology*, dealing with the relation of the plant or animal to its environment; *Palæontology*, treating of fossil forms; *Physiology*, dealing with the functions of parts; *Embryology*, dealing with the changes undergone in the development from an egg to the adult form; and *Classification*, or *Systematic Biology*, dealing with the grouping of related forms. Aside from the studies of the actual plant and animal form and life, the science has developed its own *History* also, and a somewhat distinct branch of *Philosophy*. Its *History* is the story of the work of many noted naturalists. Its *Philosophy* seeks to explain the general facts of the science through theories of heredity, evolution, and variation. In a strict sense, all these are embraced in the modern science of Biology.

Relation of Biology to Natural History. The term Natural History, as applied to plants and animals, does not lend itself to definition so readily as does the term Biology. It was used to designate that general study which preceded the more exact, comparative, and systematized study which characterizes the modern science of Biology. It concerned itself with out-of-door inquiries