

Evolution of life forms - A Theory

Conventional religious literature tells us about the theory of special creation. This theory has three connotations. One, that all living organisms (species or types) that we see, today were created as such. Two that the diversity was always the same since creation and will be the same in future also. Three, that earth is about 4000 yrs old. All these ideas were strongly challenged during the nineteenth century. Based on observations made during a sea voyage in a sail ship called H.M.S. Beagle round the world, Charles Darwin concluded that existing living forms share similarities to varying degrees not only among themselves but also with life forms that existed millions of years ago. Many such life forms do not exist any more. There had been extinctions of different life forms in the years gone by just as new forms of life arose at different periods of history of earth. There has been gradual evolution of life forms. Any population has built in variation in characteristics. Those characteristics which enable some to survive better in natural conditions (climate, food, physical factors, etc), would outbreed others that are less endowed to survive under such natural conditions. Another word used is fitness of the individual or population. The fitness, accordingly

to Darwin, refers ultimately and only to reproductive fitness. Hence, those who are better fit in an environment, leave more progeny than others. These, therefore, will survive more and hence are selected by nature. He called it natural selection and implied it as a mechanism of evolution. Let us also remember that Alfred Wallace, a naturalist who worked in Malay Archipelago had also come to similar conclusions around the same time. In due course of time, apparently new types of organisms are recognisable. All the existing life forms share similarities and share common ancestors. However, these ancestors were present at different periods in the history of earth (epochs, periods and eras). The geological history of earth closely correlates with the biological history of earth. A common permissible conclusion is that earth is very old, not thousand of years as was thought earlier but billions of years old.