

Edward O Wilson passed away

By IASToppers | 2021-12-28 17:25:00



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Recently, Edward O. Wilson (1929-2021), a US naturalist, died at the age of 92 in Massachusetts. He was dubbed as the “modern-day Darwin”.

Contributions of Edward O. Wilson:



[ref:IE]

- He was considered as the one of the world's leading authorities on natural history and conservation.
- He was also as an **entomologist** (person who studies insects).
- He also wrote a famous book, **Sociobiology: the New Synthesis (1975)**.
- His **Half-Earth Project** calls for protecting land and sea to reverse the course of species extinction.
 - The United Nations (UN) has urged countries for conserving 30 % of their land and ocean water by 2030. This target is known as "**30 by 30**". This effort is from inspired in part by Wilson.

Darwin's theory of evolution

Background:

- Evolution studies large-scale biological changes occurred in an organism.
- It also explains how the evolution occurred in the past, and is still occurring now.
- Before 1850s many evolution theories were already in 1859, Charles Darwin in his book **Origin of Species** more logically explained the evolution. Till now, it is widely accepted evolution theory.

Essence of Darwin's theory of evolution/ Darwin's theory of natural selection.

- It talks about evolution by way of **natural selection**.
- It says, organisms that were fit to adapt the changing environment structure, have only survived. In other words, it talks about **survival of the fittest**.

- All the species of living organisms have been gradually **evolved from common ances**

Darwin's Theory of Evolution

- Darwin's work actually included 5 separate theories
 - **Perpetual Change** is the basic theory of evolution on which the others are based stating that the world is constantly changing.
 - **Common Descent** (controversial theory) states that all forms of life descended from a common ancestor.
 - **Multiplication of Species** - species divide and split into different species, which can no longer interbreed
 - **Gradualism** - large differences actually originate from an accumulation of many smaller differences
 - **Natural Selection** - explains the selective processes of the environment, through a phenomenon called adaptation.

[ref:pintrest]

Criticisms of Darwin's theory of evolution

- Natural selection is not the only factor responsible for evolution, which Darwin didn't focus on.
- Darwin didn't mention any explanation about useful and useless modifications.
- There is no explanation for slow changes and abrupt changes.