

# Natural selection

[Science](#), [Biology](#)



Biology Topic: Natural Selection--describe how and why natural selection is an important concept in

Evolutionary Biology

The effect of natural selection is at the level of the individual. Natural selection plays the important role in shaping the individual genotype. George Christopher Williams in his book “Adaptation and Natural Selection” writes, “The contest was decisively won by natural selection, in my opinion, when by 1932 the classic works of Fisher, Haldane, and Wright had been published.”

(3) Acceptable evidence is not forthcoming in support of other systems of evolutionary change or any other genetic system of adaptations. Thus natural selection in shaping life is the accepted theory.

The world is going through the process of changes at different levels and most of them are related to human activity that goes on without intermission. Evolutionary biology provides perfect understanding and increases awareness. Regina Bailey argues that “Biological evolution is defined as any genetic change in a population that is inherited over several generations. These changes may be small or large, noticeable or not so noticeable. In order for an event to be considered an instance of evolution, changes have to occur on the genetic level of a population and be passed on from one generation to the next.”(Bailey...)It helps to predict short and long-term results of variations in the environment, global warming and results of application of pesticides. Interaction between adaptation and chance are the conflicting agents in the process of natural selection. When we say variation is the key concept, the role of lineages that are engaged in competition goes to prove the importance of natural selection. Biological species are not

unchangeable entities and they are ever on the flux.

Regina Bailey further states, “ Natural selection is the process by which biological evolutionary changes take place. Natural selection acts on populations and not individuals..... Evolution suggests that all life is connected and can be traced back to one common ancestor. A literal interpretation of biblical creation suggests that life was created by an all-powerful, supernatural being.”(Bailey)The Process of Natural Selection, as propounded by Darwin has four components. They are “ variation, inheritance, high rate of population growth and differential survival and reproduction.”(2011, Medical...) Viewed from any angle, natural selection is an important concept in evolutionary biology.

#### Works Cited

Williams, George Christopher. Adaptation and Natural Selection. Princeton University Press,

May 13, 1996, Print.

Bailey, Regina. Biological Evolution

Web: [biology. about. com/od/evolution/a/aa110207a. htm](http://biology.about.com/od/evolution/a/aa110207a.htm)

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