

# [Inner fish evolution assignment](https://assignbuster.com/inner-fish-evolution-assignment/)

He established that all species of life have descended over time from common ancestors. The term “ natural selection” was popularized by Charles Darwin who intended it to be compared with artificial selection, now more commonly referred to as selective breeding”. (Wisped, 2014) While in the Galapagos Islands while on “ the voyage of the beagle”, Charles Darwin discovered finches that where the same species, yet depending on their environment had different types of beaks. “ In 1859, he set out his theory of evolution by natural selection as an explanation for adaptation and speciation.

He defined natural selection as the “ principle by which each slight variation (of a trait), if useful, is reserved”. (Wisped, 2014) The concept was quite simple, the individuals that best adapted to their environments are most likely to survive and reproduce. If the traits which have helped to survive are inherited, that leads to a progressive evolution of particular populations of a species, and populations that evolve to be sufficiently different eventually become different species. For example, a group of beetles that live on a black sand environment are being picked off by birds.

There are a few variations between the beetles; there are light as well as dark beetles. The light ones re seen much easier and are the ones being picked off, as the black less-visible ones have a much higher chance of survival are the ones who are able to survive in that environment. As years go by, the light beetles slowly become extinct in that particular environment and the darker ones through inheritance have evolved through natural selection and are able to survive. Fossil records can show proof of evolution in every living species, and how they change slowly over time, but there is a problem.

There Just isn’t enough fossil record evidence to show the relationship between the two “ Charles Darwin”. Http:// Darwinian. Christi. Cam. AC. UK/ , 2014) Evolution occurs in many ways, one being Natural Selection, but there is a lack of fossil evidence to prove of this. (http:// www. Bobolink. Com/, 2014) “ The history of life on Earth is recorded in sediments and rocks as fossil remains. When fossils are considered in the context of geological history, scientists can begin to describe the changes in organisms that have taken place over vast expanses of time.

Here we’ll explore how fossils form, how they are prepared, and what they can tell us about life on earth, past and present. (http:// animals. About. Com/, 2014) That being said, clearly Natural Selection should show in fossil records and may do so, over time. For example, the finches Charles Darwin explored in the Galapagos, through natural selection and evolution over time the species evolved to best survive in their environment. It may take years, but I think they will eventually show up in the fossil records. “ The fossil record – in defiance of Darning’s whole idea of gradual change – often makes great leaps from one form to the next.

Far from the display of intermediates to be expected from slow advance wrought natural selection many species appear without warning, persist in fixed form and disappear, leaving no descendants. Geology assuredly does not reveal any finely graduated organic chain, and this is the most obvious and gravest objection which can be urged against the theory of evolution. ” (Almost Like a Whale, p. 252) (http:// www. Transcendence. Org. UK/, 2014) “ Embryology is the study of the development of embryos from fertilization until they become fetus, or the point at which you can distinguish the species.

Comparative embryology is the comparison of embryo development across species. All embryos pass from single cells to multi-celled zygotes, clumps of cells called morals, and hollow balls of cells called blastula, before they differentiate, creating the organs and systems of the body. “(http://education. Seattle. Com/, 2014) For example, bats have obtained a wing based on the forelimb module and anemometers have acquired Jaws differentiated from the mandible arch. Embryonic units such as these are also the sites at which regulatory genes are specifically expressed. Http://www. Centerpieces. Com/, 2014) Although, there is proof of evolutionary development through comparative embryology as the traits pass from embryos to other cells. One explanation for the forelimbs’ similar composition is descent with modification. Through random mutations and natural selection, each organism’s anatomical structures gradually adapted to suit their respective habitats. (http://en. Wisped. Org/, 2014)Therefore, evidence shows that comparative embryology has played a part in evolution. Evolution by natural selection is something occurring right now.

Bacteria have become more resistant to antibiotics since the inception of antibiotics 60 years ago. As we create more antibiotics, more resistant strains of bacteria develop, resulting in he continuation of only the most antibiotic-resistant strains of bacteria (and the dying out of non-resistant strains). “ Antibiotic resistance evolves naturally via natural selection through random mutation. ” (http://www. Scenically. Com/, 2014) Natural selection processes in disease-causing bacteria are widely documented.

For example, a person who is ill because of disease-causing bacteria can become well when given antibiotic drugs, which destroy the bacteria in the person’s body. Bacteria that once were quelled by a particular type of antibiotic drug become “ resistant” to the drug over time. The first time the drug is used, most of the bacteria are killed, but some of them can survive, if they have a gene or genes that allow them to withstand the drug’s effects somewhat. The ones that survive are better adapted to deal with t particular type of antibiotic drug.

If the survivors are able to reproduce inside the person’s body (for instance, if the patient stops taking antibiotics early), then the generation of bacteria is better suited to deal with the antibiotic drug as well. If t drug is used again, the bacteria will be more resistant to the drug; more will us and be able to reproduce and the person remains ill. That’s when a doctor will try different type of antibiotic. Hopefully the bacteria will not be well adapted to the other drug, will be destroyed, and the person will get well.