

“Species Loss is a Natural Result of Evolution”

EVOLUTION is related to the ability of living organisms to adapt to changes in their environment. Thus, the abiotic changes in nature, such as climatic and atmospheric upheavals, repeated glaciations, continental drift and the formation of geographical barriers, segregated different communities of plants and animals and gradually led to formation of species over millions of years.

Hence, loss of species and evolution of new species has been the theme of natural cycle of life on earth, over the geological time scale from pre-cambrian era to Cainozoic era; neither the environment nor the species that thrived in it remained static. However, during the recent past extinction caused by activities of modern humans has reached an unprecedented rate, earth is now losing species at a faster rate than ever before. Human habitations have led to fragmentation of biomes, creating ecotones diluting the core natural biomes resulting in irreversible loss of biodiversity at a rate 1000 to 1,00,000 times faster than natural rate and is expected to result in extermination of 25% of existing species in next two to three decades. This poses great challenges to future welfare and sustainability of mankind on this planet.

Kranthikumar
New Delhi

EVOLUTION entails progress and to maintain the ecological balance evolution should be through sustainable development. The extinction of dinosaurs from the planet had been due to a meteor

hit (an astronomical event). However, the near-extinction of vultures due to the use of



the drug ‘diclofenac’ on ca. le, of tigers and rhinoceroses due to poaching, of certain species of fish due to destructive methods of fishing such as ‘bottom trawling’, of medicinal herbs due to global warming and climate change, etc., are all essentially anthropogenic events. The need of the hour is to realize that the earth is not meant only for satisfying the human beings’ short-term material needs. ‘Homo sapiens’ – the most evolved species on the planet – have a greater responsibility to undertake. Sustainable development – growth while maintaining harmony with all the other living beings of the ecosystem – is the right path to evolution.

Vitthal Joshi
Dehradun, Uttarakhand

EVOLUTION means an orderly change from one condition to another. It is considered that the diverse groups of organisms share a common ancestor. Thus, species loss isn’t at all a result or outcome of Evolution. Evolution caused changes, and these changes were a boon for some and disaster for others. A strong predator always wins over a clumsy prey. So, it may mean that Evolution indirectly caused decline of species, but is not itself responsible for it. But Evolution does not mean extinction. Till date whatever

data has been collected, states that extinction is a cause of natural calamities or due to some ‘inhuman’ activities. It is till date difficult for us to imagine about the specific changes that took place in innumerable organisms. Evolution certainly brings some be. er days for organisms and is no way a cause of species loss.

Gourav Kumar Tanti
St. Xavier’s School, Bardhaman

LOSS of species is a continuous process occurring since the existence of life on earth. We all know from the fossils that



the giant dinosaurs of the Triassic and Jurassic periods became extinct due to constant massive evolution followed by adverse natural calamities. But in most cases evolution is mistaken as extinction, because according to many scholars and paleontologists there are numerous proofs that the modern day birds (aves) evolved from a particular type of flying bird-footed dinosaurs. So, although loss of some species takes place due to evolution yet it serves as natural process to restore ecological balance, because the old should go for the new to come.

Loss of species due to evolution takes place over thousands of years but in this modern era human activities like excessive pollution, illegal hunting and poaching of

endangered species for trading their valuable body parts and organs are the primary cause of the ongoing extinction events.

Soumadip Sen
West Bengal

EARLIER, the species loss was only due to natural results of evolution but today pollution, population, deforestation, radiation and building development is responsible for loss of species. The extinction of passenger pigeons was a natural result of evolution but today tigers and sparrows are vanishing day by day due to deforestation, pollution, and increasing population.

Jaisha Priyam M
Subbiah Vidyalayam Girls’ Hr. Sec. School, Tamilnadu

‘**CHANGE** is the only constant thing in the world’. As the new species of living organisms are developing as a result of evolution, in the same way, the ancient species get destroyed. Moreover, most of the lost species came to an end due to inability to survive in the changing climate. That is, due to the natural defects. Hence, it is a natural result of evolution.

Angad Kulkarni
YCE, Nagpur.

THE dinosaurs and the mammoth are suitable examples to prove the statement. The pre-existing species were outlived by the new species. Nature itself has a phenomenon of natural selection. What seems fittest, survives. This is the only reason for species to become extinct. But at the same time, new species evolve.

Aaaditya “Anjaan”

Aaaditya “Anjaan”

SPECIES are not only evolving constantly but are also changing. Plants and



animals have evolved with time. As the world changed, all the factors were affected in one way or the other. It suited some animals better than others. They did well and became plentiful. Whereas others who didn't adapt to the changes became extinct.

Akansha Sharma
Chhindwara, MP

EVOLUTION is a progressive and developmental process. Evolution always wins. Even at the present moment we are in the process of evolution. Species consistently seek perfection and rectify themselves to adapt and utilize the surrounding more and more effectively. Dominating



species are those which have evolved the best over other species. Evolution takes best part forward and leaves the undesirable traits behind. A time may come when normal human and animal species would be completely replaced by the more smarter and much better evolved species (i.e. super human qualities).

Mradul Buddekar

Pune

SPECIES loss is definitely a natural result of evolution. So is species gain. Conventional wisdom of “old order making way for new ones” has been proved again and again in all spheres of human existence. Interpreting it in terms of evolutionary biology would mean old species are creating space for new ones, which is evolution itself. This continuous mechanism both makes and unmakes species. But, from a microscopic angle, we see that alongside natural degradation, we humans too are equally responsible for this loss.

Mayukh Bagchi
Anandapally, Sodepur

EVOLUTION is a natural phenomenon whereby newer species formation takes place from older ones under favorable environmental conditions. When there is competition for living within various organisms, those animals will survive, which can



adapt to all kinds of climatic changes. Thus, competition for food & thus for living under extreme environmental conditions, squeezes out most species, which is a species loss, thus, by natural selection, a natural result of evolution.

Indrani Bagchi

EVOLUTION is a natural process which follows a “self evident” mechanism. It causes heritable variation existing within population of organisms. Organisms of a particular species start producing more progeny than can actually survive. Thus, survival strategies are not accomplished and the



traits vary among individuals, leading to different rates of survival and reproduction. So when organisms die, they are replaced by the progeny of parents better adapted to survive and reproduce in the environment. Thus, in such a process species loss is sometimes regarded as an evident mechanism for life existence on this planet.

Soumak Das
Calcutta Institute of Engineering and Management

SPECIES loss is an alarming factor which endangers our world. However, evolution is one of the major causes of extinction of species. Natural selection acts to propagate beneficial genetic traits and



eliminate weaknesses. But a deleterious mutation can also be spread throughout a population through genetic drift which can eventually lead to the extinction of the victim species. There are many other factors too responsible for the extinction of species such as climate change, co-extinction, competition, disease and predators. Thus we shouldn't blame it wholly on natural course of evolution.

Abhigyan Das
R.K.M.V. Narendrapur, Kolkata

EVOLUTION is a process as well as a result. But Darwin, the

father of evolutionary studies considered it a phenomenon taking place with the help of a master key, “Natural Selection”. According to him the species, fit reproductively survive and the species that can't do it or cope with the natural changes either surrender or undergo extinction. That is the reason why we, the humans, are dominating the world now but not the dinosaurs. There may be some catastrophic changes, which we may or may not be able to cope with and finally go extinct. Some new species will dominate the world. But it solely means the adaptation of the finest character & dominance of highly modified species. It is not really species loss but a remodification in the diversity which is a bare necessity to maintain the natural system smoothly.

Sthitaprajna Nath Sharma
Odisha

SPECIES loss is a cause for concern but it is a very natural process. Nothing lasts forever. The poet Alfred Tennyson has written, “The old order changeth yielding place to new. And God fulfils himself in many ways. Lest one good custom should corrupt the world.” Old man Darwin would say that the disappearance is a direct consequence of the struggle for existence. It must be stated that Homo sapiens, being at the top of the evolutionary ladder, have made life miserable for lowly animals by encroaching on their habitat and exploiting the bounties of nature in an unabashed manner. Fortunately, there are some intrepid ones who are trying to resurrect extinct animals, such as mammoths, etc. Some are contemplating to bring back to life the Jurassic period dinosaurs, but at the present moment appropriate technology is lacking.

Dr Shiv Kumar
Jaipur-20

EVOLUTION refers to the theory that existing animals and plants have evolved through a process of continual change from previous life forms. So, species lost are



actually not completely lost. They have evolved into another type or form, having some common features of their previous form. This is the result of evolution and this is how evolution works. It is probable that millions of years later, we Homo sapiens may evolve into another upgraded form of humans with more new features and great intelligence.

Joyeeta Chakraborty
Kendriya Vidyalaya Barrackpore Air Force

SPECIES loss is not a natural result of evolution. Scientists believe that the change of climate is the reason behind the extinction of dinosaurs. But, I think climate cannot change in one day, it takes much time. So, as the climate changed the dinosaurs should have adapted themselves to the climate also. So, nature is not only the reason for the extinction of dinosaurs. Cockroach is one such organism that survives from the dinosaur era till today. Now-a-days the animals which are on their way to extinction are endangered because of humans. Humans kill animals like tiger, rhinos for their own profit. When these animals will go extinct then also we

cannot blame nature for their extinction. The towers for phones are also one of the reasons for the extinction of birds like sparrows. So, now-a-days species loss is not a natural result of evolution, it is the result of human's activity.

Sarthak Sengupta
Class V, St Augustine's Day School, Barrackpore, West Bengal

IN sexual reproduction there arises lot of variation to the



offspring which is observed for higher species like animal and man. According Darwin's "Struggle for existence & survival of the superior" those species are lost which have no or less struggling power. This law is equally applicable for all species hence it is inevitable that species loss is a natural result of evolution.

F. Kibria (Jeemey)

SPECIES loss can be the natural result of evolution. However, there are very few places in the world where humans haven't impacted the natural result of evolution, so we should be concerned about this process. Biodiversity is relatively important and the larger our population becomes the more danger there is to biodiversity.

Ghanasyam Gouda
Bhanjanagar, Odisha

EXTINCTION of the species our Earth has witnessed is the result of evolution. Many species like the mammoth and the giant sloth have become extinct due to evolution. We humans have evolved from primitive apes who are different from us and their environment was also contrasting. Many species living with our ancestors are no longer extant ion. Whenever, environment changes many species are wiped out who are unable to survive the new environment contrary to theirs which is evolution. But nowadays in the environment we are amidst there many species are getting lost due to drastic changes in the environment where humans dominate the Earth is not because of evolution but because of the activities of humans that are leading to radical changes and eventually their extinction.

Nipun Kumar
Class 10, St Paul's School, Begusarai, Bihar

EVOLUTION has been the cause of creation of new species (speciation) and extinction of old species as well. Evolution is governed by factors such as natural selection, fitness of species (Darwinian theory), etc., which gradually results in the loss of certain species unsuitable to flourish in the environment (e.g. dinosaurs). But, solely blaming evolution for species loss is basically trying to justify massive killing and poaching, which is absolutely irrational. Natural evolution takes place over thousands of years and is quite slow by nature. Greenhouse effect, global warming, ozone depletion, etc. are forced



upon the environment by human activities and blind industrialization, which in turn accelerates species loss to a large extent.

Sankalp Ranjan Jha
Bumrapur, West Bengal

ARE humans not to be blamed? Species loss, to some extent, is quite evidently a natural result of evolution. Other natural causes for the loss of flora and fauna include natural calamities such as forest fires, floods, tsunamis, landslides, earthquakes, volcanoes, etc.



But all these are quite trivial causes for species extinction as compared to selfish and cruel human activities – hunting, killing, poaching, rapid industrialization and pollution, etc. Obviously, avoiding natural disasters isn't in our hands, but at least we can join hands to curb those human activities which are threatening the survival of many creatures and putting a question mark on the very existence of certain species.

Saumya Ranjan Jha
Bumrapur, West Bengal

Now write in your thoughts on this topic:

“Should humans colonize Mars?”

Be short, crisp and logical. Send in your photo, if you like.