

Relationship between Climate Change and Biodiversity

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Ways that Climate Change and Biodiversity are Related.

Scientists accept the notion that climate change and biodiversity are interconnected and that climate change is a new threat to biodiversity. If biodiversity is adversely affected, it will bring disastrous results for human well-being. Managing and conserving biodiversity is essential as biodiversity also contributes to climate change mitigation through its ecosystem services. For example, forests that have been conserved can remove carbon dioxide from the atmosphere, thus helping to address climate change by storing carbon.

Climate change will impact different areas of the world to different degrees. Some species may be able to adapt to climate change but it is a fact that many species are susceptible to climate change. It all depends on a variety of biological traits including the species life history, ecology, behaviour, physiology and genetic makeup.

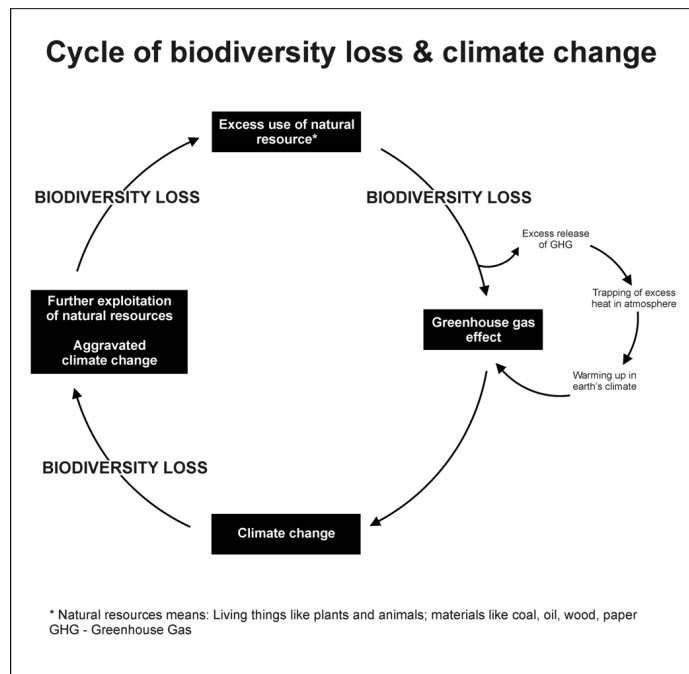
Predicted aspects of climate change

Frequent storms
Frequent droughts
Frequent floods
Frequent fire
Increased Carbon dioxide in atmosphere
Increased Carbon dioxide in Ocean
Extreme rainfall
Change in rainfall pattern
Temperature extremes
Sea level rises
Changes in seasons

leads to

Effects on species

Changes in species distribution ranges
Loss of habitats
Death of species due to increased stress
Changes in birth rate – change in population structure
Changes in sex ratios
Changes in competitive ability
Impact on migration and dispersal
Disconnection of prey predator relationship
Emerging new pathogens
Problem with invasive species



The present cause of Climate change is man-made. Excess use and over-exploitation of natural resources through industrialization, and use-pattern, deforestation, large scale farming of domesticated animals, etc., are the main causes of global warming that leads to climate change.

There is also a teaching Manual in process on climate change which utilizes these and other materials to teach educators how to . It is not shown here.