

Diversity of life

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



Diversity of Life" Q1. Why are there so many different kinds of plants and animals on earth? Earth is spherical in shape and does not receive equal amount of sunlight at all places. Depending upon the amount of sunlight any geographical locale receives, climatic conditions occur. Based on these climatic conditions, earth is divided into different climatic zones encompassing frigid zone, where the land is covered with snow for most part of the year; the temperate zone where mild or moderate climate occurs and the tropical zone where the climate is very hot and wet. Climate of the place also includes various other factors such as wind, humidity, distance from the sea, amount of rainfall, elevation from the sea level etc. These vital factors play an imperative role in deciding the kind of flora and fauna of the place, accordingly, different kinds of ecosystems are present in different parts of the world.

Tropical zone is hot as it receives most of the sunlight falling on the planet. The rate of evaporation is also high, rainfall and humidity is more. The vegetation is thick and most of the Rainforest is present in this region. Thus, climate of a place decides the vegetation and animals of the place. For instance, desert conditions cannot support pine forest but they support animals like camel with padded hoofs to walk on the hot sand and membrane-covered eyes to see during desert storm. The animal is well adapted to live under water scarcity condition because of its hump which stores fat. In a similar manner, desert conditions also support cactus plants which are well adapted to the climatic conditions of desert, the leaves are modified as spines and thick stem to carry out the process of photosynthesis.

In a similar manner, pine trees with conical shape and wax coated, needle like leaves are the adaptive features of the flora belonging to the frigid zone. The conical shape and wax coated leaves of the plant allows snow to slide off the plant. Needle like leaves allow air to pass through the plants, these features aid in better survival of the plant. The fauna of the frigid zone encompasses polar bear which has white fur for protection from the chill of snow and also to escape from the enemies. Other animals encompass seal, wolf and dogs called huskies.

Temperate zone on the other hand, possess mild climate which is neither too hot nor too cold. This climatic zone supports good conditions for the survival of humans, as the climate is moderate it allows proliferation of numerous life forms. Distribution of animals and plants in this climatic zone is also supported by the environmental agents and the atmospheric pressure.

Whether marine or land forms, distribution of flora and fauna are directly related with the environmental conditions. This results in a variety of flora and fauna prevalent on the planet. Adaptation to these environmental conditions is attributed to the years of modifications in their genetic makeup to reach to the present form. Various cataclysmic happenings have disturbed the evolution of the living organisms, as a result of these modifications old species become extinct or are replaced by the newer species. For instance meteorite strike has eradicated the dinosaurs and mammoths from their roots but new species replace the old ones.

The subject is of great concern as the present era is also witnessing diversity of life forms because of human interventions. Cutting down trees for human establishments is a selfish deed that is responsible for taking away the

homes of innocent plant and animal communities. Wilson has explained diversity in life in an explicit manner, it is the need of time to generate awareness to preserve the diverse forms of life from becoming extinct. Wilson emphasized that in the race of becoming economically developed nations are ignoring their basic responsibilities towards the conservation of the resources.

Work Cited

Wilson. " Diversity of Life". Publisher: Harvard University Press. 1992.