

Class VIII Science

Notes for Conservation of Plants and Animals

Facts that Matter

- National parks, sanctuaries and biospheres reserves are maintained to conserve forests and wildlife.

- **Deforestation and its causes:**

The variety of plants and animals existing on earth are essential for the well being and survival of mankind. Today a major threat to survival of mankind is deforestation.

Deforestation means clearing of forests and using that land for other purposes, i.e. for industries set up or making building for rehabilitation. The causes of deforestation may be:

- Procuring land for cultivation. - Building houses and factories.
- Making furniture, using wood as fuel and
- Natural causes such forest fires and draughts.

- **Effects of deforestation:**

Deforestation causes increase of atmospheric temperature due to increase in concentration of carbon dioxide leading to global warming.

Severe draughts and floods.

Deforestation changes the nature of soil, water holding capacity and soil erosion. Gradually, the fertile land gets converted into deserts. It is called desertification.

Deforestation causes the destruction of habitat of wildlife, its survival becomes difficult.

- **Biosphere:** The part of the earth in which living organisms exist or that supports life is known as biosphere.
- **Biodiversity or Biological diversity:** It refers to the variety of organisms existing on the earth. Their interrelationships and their relationship with the environment. It includes variety of plants, animals and microorganisms.
- **Flora and Fauna:** The plants found in a particular area are termed as flora area.
The animals found in a particular area are termed as fauna of that area.
- **Endemic Species:** Those species of plants and animals which are found exclusively in a particular area are called endemic species to a zone, a state or a country. For example, sal and wild mango endemic flora of the Pachmarhi Biosphere Reserve. Animals such as Bison, Indian giant squirrel and fly squirrel are endemic fauna of this area.
- **Species:** A group of population or populations whose members have common characteristics and are capable of interbreeding among themselves to produce fertile off-springs. Normally, members of a species breed amongst themselves and not with members of other species.
- **Biosphere Reserve:** A larger protected area meant for conservation of biodiversity and culture of that area is called Biosphere Reserve. A biosphere may consist of other protected areas such as National Parks and Sanctuaries. For example, Pachmarhi Biosphere Reserve consists of one National Park called Satpura and two Wildlife Sanctuaries known as Bori and Ault marhi.
- **Wildlife Sanctuaries:** These are the protected areas which provide protection and suitable living conditions to wild animals. Sanctuaries are places where killing (poaching) or capturing of animals is strictly prohibited.
A sanctuary may be a reserved natural area meant for the preservation and development of threatened/endangered species. For example, there is the Kaziranga Wildlife Sanctuary for Rhinoceros in Assam.
- **National Park:** A national park reserve is large and diverse enough to protect whole set of ecosystem. National Parks preserve flora, fauna, landscape and historic objects of an area. For example. In the Satpura National Park, Rock shelters and Rock paintings are also preserved along with flora and fauna.
- **Comparison of a Sanctuary and a National Park:**

- **Endangered Animals:** Animals whose numbers are diminishing to a level that they might face extinction are known as the endangered animals. For example, dinosaurs became extinct a long time ago.
- **Ecosystem:** All the living components, such as plants, animals and microorganisms and nonliving components such as climate, soil, river, deltas etc. constitute an ecosystem. An ecosystem can be as small as a pond or as big as an ocean or a forest.
- **Red Data Book:** The source book which keeps a record of all the endangered animals and plants. There are different Red Data Books.
- **Migration:** The phenomenon of movement of a species from its own habitat to some other for a particular time period every year for a specific purpose like breeding is known as migration.
- Reuse and recycling of paper save trees, energy and water.
- Reforestation is restocking of the destroyed forests by planting new trees.