# Conservation of Plants and Animals

**Conservation**

It is the protection of natural resources like plants, animals, soil, water, fossil fuels etc. and the sustainable use of such resources. Natural resources are grouped into two categories: renewable resource is the one that may be replaced over the time by natural processes such as fish populations, natural vegetation or is inexhaustible such as the solar energy. Nonrenewable resources are those which are limited in supply and cannot be replaced even over extremely long period of time. The nonrenewable resources include fossil fuels and mineral deposits, such as iron ore and gold ore. Conservational activities for the nonrenewable resources focus on maintaining an adequate supply of these resources well in the future.



Natural resources are conserved for their biological, economical and recreational values, as well as their natural beauty and importance to the local cultures. For example, tropical rainforests are protected for their important role in both the global ecology and the economic livelihood of the local culture. A coral reef may be protected for its recreational value for scuba divers and a scenic river may be protected for its natural beauty.

**Biodiversity**

A wild range of different types of organisms which grow, multiply and thrive naturally, are found at any given time in a particular habitat. We should conserve forests and wildlife to preserve biodiversity to prevent endangered species from becoming extinct and to maintain ecological balance in nature.

**Deforestation**



Deforestation means large scale removal of forest prior to its replacement by other land uses Forests are removed for a variety of reasons, including agriculture, timber harvesting, mining and to make way for roads, dams and human settlements.

**Protected Areas**

Protected areas are the areas of land or sea especially dedicated to the protection and maintenance of biodiversity. These are managed through legal means and have been set up within the legal frame work of Indian wildlife (Protection) Act.1972. Examples of protected areas are national parks and wildlife sanctuaries.

**National Parks**

A national park is a large area dedicated to conserve the environment, natural resources and the wildlife therein. In a national park,

- ❖ private rights are non-existent.
- ❖ forestry operations, grazing of animals and hunting of animals are prohibited.
- ❖ visitors are allowed to enter only for study, cultural and re-creative purposes.
- ❖ exploitation of habitat or wildlife is banned.

## Wildlife Sanctuaries

- ❖ A wildlife sanctuary is similar to a national park. However, it aims only at conservation of species. The wildlife sanctuaries have the following features:
- ❖ The boundary of a sanctuary is not limited by state legislation.
- ❖ The killing, hunting or capturing of any species is prohibited.
- ❖ Private ownership may be allowed to continue in a sanctuary.
- ❖ Forestry and other usages may be permitted, but to the extent that they do not affect wildlife adversely.

## Forest Reserves

These forests are primarily reserved for raising trees for the production of timber or wood for industrial use. They also provide other products such as pulp, cellulose an medicinal plants.

## Zoological Gardens

Zoological gardens or parks and zoos are places where the wild animals are kept in a protected environment under human care for public display. All the animals in zoos are provided with the conditions similar to their natural habitats as far as possible. The aim is to enable us to learn about their behaviour and food habits.

## Botanical Gardens

Botanical Gardens play an important role in the conservation of plants species. They have collections of living plants for reference. Plant species are grown for identification purposes and each plant is labelled to indicate its scientific name, common name or vernacular name. A famous botanical garden in India is the Indian Botanical Garden situated at HOWRAH (Kolkata).

## Flora and Fauna

Some plants and animals typically belong to a particular area and they are not found naturally in other areas. The 'plants' that grow naturally in a particular area are called 'flora' of that area. And the "animals" which live naturally in a particular area are called 'fauna' of that area. For example. Teak, Jamun, Fern, (Sal) Mango and Arjun are the Flora of Pachmarhi Biosphere reserve. Cheetal Wolf, Leopard, Chinkara, Blue bull. Barking deer, and Wild dog are the examples of fauna of the Pachmarhi Biosphere Reserve.

## Endemic Species

The species are those species (of plants and animals) which are found exclusively in a 'particular area'. Sal and wild mango are the two examples of the endemic flora (or endemic plants) of the Pachmarhi Biosphere Reserve.

## Extinct Species

The species which no longer exist anywhere on the earth are called extinct species. It means that this animal has no living member on the earth. All the members of this animal species have died out. Some of the examples of extinct species of animals are: Dinosaur, Dodo, Cave lion, Caspian tiger and Irish deer.

## Endangered Species

The species which are facing the risk of extinction are called endangered species. They are the animals and plants that exist in small numbers on the earth, and if we do not take quick action to save them, they may be lost forever (or become extinct). Some examples of endangered animal species are: Tiger, Snow leopard. Great Indian rhinoceros, Asiatic lion, Desert cat, Lion-tailed macaque, Namdapha flying squirrel, and Kashmir stag.