

Unit 4 Lecture 8

Endangered flora and fauna are the species with fewer individuals because of unfavourable environmental factors or human factors and that its natural regeneration is not able to keep place with exploitation or destruction by natural and unnatural means. If the same factors continue to operate as before the species would extinct soon.

An endangered species is a population of an organism which is at risk of becoming extinct because it is either few in numbers, or threatened by changing environmental or predation parameters. An endangered species is usually a taxonomic species, but may be another evolutionary significant unit. The International Union for Conservation of Nature (IUCN) has calculated the percentage of endangered species as 40 percent of all organisms based on the sample of species that have been evaluated through 2006. (Note: the IUCN groups all threatened species for their summary purposes.) Many nations have laws offering protection to conservation reliant species: for example, forbidding hunting, restricting land development or creating preserves. Only a few of the many species at risk of extinction actually make it to the lists and obtain legal protection. Many more species become extinct, or potentially will become extinct, without gaining public notice.

India is home to several well known large mammals including the Asian Elephant, Bengal Tiger, Asiatic Lion, Leopard and Indian Rhinoceros. Some of these animals are engrained in culture, often being associated with deities. These large mammals are important for wildlife tourism in India and several national parks and wildlife sanctuaries cater to these needs. The popularity of these charismatic animals have helped greatly in conservation efforts in India. The tiger has been particularly important and Project Tiger started in 1972 was a major effort to conserve the tiger and its habitats. Project Elephant, though less known, started in 1992 and works for elephant protection. Most of India's rhinos today survive in the Kaziranga National Park. Other well known large Indian mammals include Water Buffalo, Nilgai, Gaur and several species of deer and antelope. Some members of the dog family such as the Indian Wolf, Bengal Fox, Golden Jackal and the Dhole or Wild Dogs are also widely distributed. It is also home to the Striped Hyena. Many smaller animals such as the Macaques, Langurs and Mongoose species are especially well known due to their ability to live close to or inside urban areas.

Endemic species

Endemic species are those species, which are restricted and confined to certain geographical area. Western Ghats, Eastern Himalayas, and Western Himalayas have been identified as such pockets, which contain maximum number of endemic species. About 315 species of vertebrates comprising 36.6% of total number are supposed to be endemic

in Western Ghat. About 37% of vertebrates of North East India are endemic. In Western Himalaya altogether 2178 animal species are identified as endemic, which includes 1343 invertebrates and 835 vertebrates. A brief description of endemism in various taxa is given below

Endemic species

Mammals-38

Birds-69

Reptiles-214

Amphibia-110

Insects-16,214

Molluscs-967

Faunal Wealth of any geographical area is of immense importance because they play important role in ecological balance. Some specific uses of implication of tourism on wildlife are as follows-Chilka lake of Orissa is a gift of nature to the wetland and it was declared of an international importance by Ramsar Convention in 1971. There are 150 varieties of birds out of which 35 were migratory. Dabchicks, Coots, Spotbills, Greyducks, Bareheaded geese, pintails etc. are some important migratory birds in Chilka lake . Population of insects, fishes, molluscans and algae in the wetland has decreased and the birds are now facing shortage of natural food.

The Bharatpur Bird sanctuary has a lot of animal and plant species. Due to construction of roads, hotels, shop, tent, houses, the land use pattern is changed and ultimately the natural habitat of most of wild life are damaged. The species of sanctuary become endemic.

In Western Ghat, there are a lot of lower and higher plant species, microbes, lower invertebrates, butterflies, fishes, amphibians, reptiles, birds, mammals. Amphibian diversity is a unique feature of Western Ghats. Western Ghats is the richest and their moist habitats harbour about 120 species of amphibians. The level of endemism is very high. The unique features of Western Ghat make it the most suitable region for eco-tourism. There are 2000 species of higher plants, 84 species of fishes, 92 species of amphibians, 89 species of reptiles, 15 species of birds and 12 species of mammals are endemic to the Western Ghat. The existing number of endemic species among the lower animals (with the exception of butterflies), lower plants and microbes remain unknown even today. This is partly due to taxonomic uncertainties that prevail in the identification of the biota at various levels pose a serious limitation to biologists as well as environmentalists in biodiversity assessment and conservation strategies.