

FOREST & WILDLIFE RESOURCES

BIODIVERSITY-The entire habitat we live in is rich in wildlife, cultivated species, diverse in form & function but are closely interrelated & interdependent in a system,

IMPORTANCE OF BIODIVERSITY-

- i- We humans along with other organisms form a complex web of ecological system & are very much dependent on the system [each other] for our existence.
- ii- Plants, animals & micro-organisms re-create the quality of air we breathe, water we drink & the soil that produces food for our survival

Name 2 plant & any 4 species of INDIA which are on the verge of extinction
Plant species-Madhuca insignis [wild variety of Mahua], hubbardia heptaneuron [a species of grass].

Animal species- cheetah, pink headed duck, mountain quail, forest spotted owl
Forest cover [actual area under forest-19.39%] Three varieties of forest cover
Open forest 7.7%, dense forest 11.48%, mangrove forest 15%

Based on the INTERNATIONAL UNION for conservation of nature & natural resources [IUCN] [Name the categories of existing plant & animal species as classified by the international union for conservation of nature & natural resources]

Normal species-species whose population levels are considered to be normal for their survival-cattle, sal, pine, rodents

Endangered species-species which in danger of extinction. The survival of such species is difficult if the negative factors that have led to a decline in their population continue to operate. [black buck, crocodile, wild ass, Indian Rhino, lion etc.]

Vulnerable species-species whose population has declined to the levels from where it is likely to move into the endangered category if the negative factors continue to operate [Asiatic elephant, gangetic dolphin]

Rare species-Species with small population may move into the endangered category if the negative factors continue to prevail [Himalayan brown bear, wild Asiatic buffalo, desert fox, hornbill]

Endemic species- species which are only found in some particular areas isolated by nature or geographical barriers [Andaman teal, Nicobar pigeon, Mithun in Arunachal Pradesh]

Extinct species-species which are not found after searches where the species might occur

A species may be extinct from local area, country or entire earth [Asiatic cheetah, pink headed duck]

REASON FOR ASIATIC CHEETAH EXTINCTION-Decline of habitat & indiscriminate hunting

REASONS/NEGATIVE FACTORS THAT CAUSE DEPLETION OF FLORA & FAUNA

- i- during colonial period forests were damaged due to expansion of the railways, agriculture, commercial & scientific forestry, mining activities

ii-after independence-agricultural expansion,deforestation of forest in tribal areas in N.En & Cn India due to shifting agriculture [between1951-1980 acc. To forest survey of India26,200kms. of forest area was converted into agricultural land]

iii-Enrichment plantation-i.e plantation of single commercially valuable species

iv-mining is another reason for deforestation

v- conversion of forest into agricultural land

vi- development projects are also the cause of for the loss of forest[river valley projects, other construction projects]

vii-grazing & wood collection

viii-habitat destruction ,hunting , forest fire ,poaching,

ix-over exploitation are other causes for the decline of bio-diversity [some valuable forest products,minerals & other products]

What are the adverse effects of the decline of India's bio-diversity or WHY do we need to conserve our forests & wildlife?

EFFECTS-i-severe drought & floods as indirect outcome ii-impoverishment of forest dependent communities iii-basic needs of forest communities like collection of fuel ,fodder ,water are not fulfilled iv- pollution of environment & ecological disturbance

v-Genetic diversity of plant & animals-their growth & breeding would be effected

NEED-to save the country from the adverse effects of the decline of biodiversity [i.e to prevent negative impacts]

Name the ACT brought out by the Govt. of India for the protection of wild life & when was it implemented?

THE INDIAN WILDLIFE PROTECTION ACT implemented in 1972

What are the main provisions of this Act

i-protection of certain endangered species of wildlife by banning their hunting , & provide legal protection to their habitats & restricting trade

ii-establishment of National parks & wildlife sanctuaries in different parts of the countries

Name the endangered species of animals which has been given legal protection against hunting & their trading

One horned rhinoceros, Kashmir stag ,[three types of crocodiles-fresh water crocodile ,salt water crocodile ,gharial] Asiatic lion ,Indian elephant ,black buck Indian Bustard ,snow leopard

What is enrichment plantation?

Ans-promotion of a few favored species in ,which single commercially valuable species was extensively planned & other species eliminated e.g teak monoculture in south India has damaged the natural forest

