
Popular Article

Wildlife Conservation and Conservation Strategies

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Abstract

Wildlife conservation is an activity in which humans make conscious efforts to protect the wild species and their habitats. Wildlife plays an important role in maintaining the ecological balance. Conservation has several advantages for maintaining the healthy ecosystem, maintaining genetic resource, recreation and education. Habitat destruction and fragmentation, poaching, illegal trades, human wildlife conflict, pollutants are the major factors contributing to wildlife extinction. Safeguarding the critical habitats, sound planning and management for captive breeding, control of illegal trading and poaching are the big way for wildlife conservation.

Introduction

Wildlife conservation is the preservation and protection of animals, plants and their habitats. The conservation of wildlife is mainly focusing on maintaining the habitat, maintaining the breeding stock and prohibition of illegal trading and killing of any animal (Santra, 2018). Thus conservation of wildlife has not only concerned with biotic factors (plants, animals and microorganism) but also with abiotic factors. Hence, the conservation of wildlife resources is intimately related to the conservation of other natural resources.

Wildlife plays an important role in maintaining the ecological balance. Each organism on this earth has a unique place in food chain that contributes to ecosystem in its own special way. We can understand with the help of an example, killing of carnivores leads to an increase in number of herbivores which in turn affect the forest vegetation, thus due to lack of food in forest they come out from forest to agricultural land and destroy the crops. Once equilibrium and stability is disturbed it leads to many problems. But sadly today, many of the wild species are getting endangered. Habitat

destruction and fragmentation, poaching, illegal trades, human wildlife conflict, pollutants are the major factors contributing to wildlife extinction (Gupta, 2017). The most serious threat to wildlife comes from habitat destruction (Naz and Hussain, 2016). The extinction of wildlife species will certainly have a fatal impact on this environment. Therefore, it is very necessary for us humans to act in a way that ensures the conservation of wildlife and natural resources.

Necessity for conservation

1. Balance of Ecological Nature

The most important point being that the natural balance in an ecosystem is maintained. Reduction in numbers of one animal interrupts the eco system and the natural food chain, and leads to the threat of other species. This balance may be disturbed due to the introduction of new species, the sudden death of some species, natural hazards or man-made causes. For an example, when all the herbivorous animals in a forest killed, the tiger and lions enter human settlements and attack human beings and domesticated species. Like that the killing of snakes for their skin allows the rat population to increase enormously.

2. Biological value

Wildlife is considered to be an ecological asset and an indicator of environmental health. Biological value of wildlife is concerned with their contribution of productive ecosystems such as pollination, seed dispersal and planting, control of animal and plant population, recycling of nutrients and sanitation through scavenging (Santra, 2018).

3. Commercial value

Wildlife is a wealthy of the country and it is a good source of income (Singh, 2009). The wildlife has become an important source of revenue nowadays. Wildlife yields timber, firewood, hides, ivory, horns, fur, etc. and are harvested for commercial purposes. Live and dead animals can be stored in Zoos and Museums for exhibition

4. Educational value

Wild animals are used for various researches and scientific studies. For example, Rhesus monkeys are widely used in biomedical research.

5. Recreation

Wildlife forms a source of enjoyment and recreation to human beings. Many professionals like photographers and bird watchers are immensely benefited through visiting wildlife conservation places.

Conservation strategies

1. Preserve wildlife habitats

Habitat destruction is the major cause of declining wildlife population. Activities like logging, industrialization, urbanization, utilizing forest area for agriculture to suffice the human needs, mining, are the human contributions to habitat destruction. Forest fire, climatic changes are some of the natural causes. By growing plants and saving trees, protecting remaining intact sections of natural habitat, introducing new ways to increase agricultural output without increasing land consumption and creating corridors are some of the solutions to protect our wildlife. Habitat corridors allow movement between isolated populations so it increases genetic diversity and also minimize the human wildlife interactions (Singh, 2009) Growing some flowering plants in the forest will attract insects which can also help in pollination. So the environment becomes greenery.

2. Stopping illegal trades

Apart from habitat loss, poaching is the next major threat to wild animals. This illegal act is being done for some ridiculous motives especially for the rare animal products such as ivory, fur, organs, skin and bones. On the other hand some animals have been hunted for food, religious purpose and some myth about medicinal values. But the actual truth is that the animal organs don't have any proven medicinal values. (Foster *et al.*, 2019). To prevent these activities, harmless and undetectable trackers need to be used to track the activities of animals. Outlawing the buying and selling of wildlife animal parts in black markets can significantly reduce poaching. International trade in wild plants and animals has to be regulated to appropriate legislative and administrative measures.

3. Reducing pollutants

Waste around the world increases day by day largely. According to survey, 5.25 trillion pieces of plastic debris present only in oceans. It creates a major threat to marine lives. Other than plastic waste oilspills, untreated sewage, industrial chemicals produce some toxic pollutants like carbondioxide, nitrogen dioxide, sulfur dioxide, ozone which will affect the humans as well as animals. At an animal level, it disturb the endocrine system, sex ratio changes and decreased reproductive parameters but also include teratogenic, genotoxic effects, immunosuppression and other immune related diseases (Erren *et al.*, 2009). By reducing the usage of plastics, recycling and reusing the wastes, ocean cleanup, using microbes and some plants to break down the chemical pollutants and treating industrial waste water to reduce pollutants are the steps to be taken to decrease the environmental pollution. The important thing is that all the wastes are produced by humans only so the care should be taken by us only to clean the environment.

4. Awareness

Creating awareness among the people who are involved in poaching, poisoning the animals to protect their livestock and superstitious activities. Youngsters should learn and be trained to impart knowledge about the value of wildlife and its management. Educating the young minds and involving them in wildlife conservation activities will create a great impact. Including wildlife education as a part in school curriculum will show some seeds of wildlife importance in the minds of future citizens. Encourage the community participation in management and conservation of wildlife will surely improve the status of wild species.

5. Adoption

Adoption is one of the methods to conserve the captive wild species. Many countries including India allowed adopting wild animals, birds which was kept in the zoo. One can contribute manifold in wildlife conservation by adopting animals through providing feed for them monthly/annually. Paying methods and payments differ from species and zoos. Animal adoption scheme will certainly help in running the conservation projects which will involve captive breeding programme especially for endangered species in various zoos. The adaption of animals by a person of the society will not only show his/her love towards wildlife but will also inspire others to follow. This small step will help in a big way for wildlife conservation.

6. Captive breeding

Captive breeding is the practice of breeding animals in a human controlled environment as a tool for conservation. It has been a popular management option for endangered species in recent years as animal population can increase more rapidly than in the wild. Captive breeding programs are generally not initiated until population numbers in the wild have fallen below sustainable levels (Philippart, 1995). Captive breeding need much more care to protect the population against genetic disease. However it is important to be aware that captive breeding alone cannot be relied upon to ensure the long term survival of endangered species.

Conclusion

The wildlife has many important roles in the improvement of human society. Their contributions to the maintenance of healthy ecosystem, maintaining of gene pool and recreation have been well documented. To help protect wildlife, it's important to understand how species interact within their ecosystems, and how they're affected by environmental and human influences. We have a great responsibility to save the precious species and the planet. If the present rate of degradation and loss of habitat continues, we will be left only with their photographs. Apart from government measures, active participation of citizens of our country is the most important thing in conservation of wildlife. By conserving wildlife, we're ensuring that future generations can enjoy our natural world and the incredible species that live within it.

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