

# A STUDY ON THE IMPORTANCE OF WILDLIFE

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## ABSTRACT

Wild animals play an important part in the ecological and biological processes that are, once again, necessary to the continuation of life. The continual interactions that take place between animals, plants, and microbes are essential to the biosphere's ability to carry out its essential functions. This, in turn, contributes to the maintenance and improvement of human life. To add on, these ecological processes are essential for agriculture, forestry, fisheries, and other activities that are necessary for human existence. In addition, there are a number of other biological processes in which wild animals play an important part. Some examples of these activities include pollination, germination, seed distribution, soil production, nutrient cycling, predation, habitat management, waste breakdown, and pest control. All living species (plants, animals, and microbes) in their natural environments are included in the definition of "wildlife." These organisms have not been grown, domesticated, or tamed in any way. But in the most literal sense, it refers to wild species of animals, reptiles, birds, and fishes, among other things.

*keywords: importance wildlife*

## INTRODUCTION

The natural world has a significant impact on the maintenance of ecological harmony. The presence of wild life lends consistency to the myriad of natural processes that occur in nature. The significance of wildlife can be broken down into several categories, including its ecological significance, its economic significance, its investigative significance, its importance to the conservation of biological diversity, and so on.

### 1. Ecological importance

The natural world would not be as stable without the contribution of its animal inhabitants. Due to a lack of food in the forest, herbivores have been driven out of the forest onto agricultural land, where they have been destroying our crops. This is a direct result of the killing of carnivores, which leads to an increase in the number of herbivores, which in turn affects the forest vegetation. As a result, once the equilibrium is disrupted, it results in a great deal of trouble.

### 2. Economic importance

Making money off of nature and its inhabitants is possible. The economic significance of wild plant products such as food, medicine, lumber, and fibres, as well as the huge economic worth of wild animal goods such as meat, pharmaceuticals, skin, ivory, lac, silk, and so on, are examples of this. Wild plant products come from wild plants.

### **3. Investigatory importance**

Experiments in science, such as testing the effectiveness of new medicines, sometimes need the use of wild creatures. In the majority of cases, primates such as monkeys, chimpanzees, etc. are utilised for research purposes.

### **4. Conservation of biological diversities**

It is possible to preserve the environment's rich variety by working to protect its native animals. Some experts believe that a more diverse ecosystem is one that is more capable of withstanding change.

### **5. As a gene bank**

A gene bank is a collection of genes from a population residing in a specific region or geographical area. It is necessary to have genetic diversity in gene banks in order to produce disease-resistant varieties of plants.

### **6. Recreation**

Children and adults alike are sure to have a good time when they go on excursions to the various parks and sanctuaries. Therefore, spending time with wildlife is the best form of recreation.

### **7. Cultural importance**

Indian religion, art, sculpture, and literature have all been profoundly influenced by the country's diverse wildlife. The natural world serves as the inspiration for a significant number of folktales and fairy tales.

### **8. Importance in agriculture**

The use of wild organisms in contemporary agriculture is of utmost importance. The following is a list of the importance of wildlife in the field of agriculture:

1. Creating new hybrid varieties using only plants found in the wild.
2. The use of wild animals in the production of superior hybrid varieties of agriculturally important animal species.
3. They have the potential to give rise to the evolution of new species of plants and animals.

## **IMPORTANCE OF WILDLIFE**

Certain importance of wildlife as below:

**1. Ecological Harmony:** Wildlife is responsible for preserving the ecological harmony of the natural world by: (a) Keeping populations of various species in check. (b) Food - chains or transmission of nutrients and energy via a succession of populations that may include producers, consumers, and microorganisms. (c) Inorganic nutrient cycles or circulation that occur naturally between biotic and abiotic settings.

**2. Gene Bank:** The Wildlife acts as a gene bank in order to facilitate the breeding of better varieties in the fields of agriculture, animal husbandry, and fishing. Breeders of both plants and animals have been able to develop high-yielding variants that are also resistant to disease and the effects of stress; these varieties are the foundation of contemporary agriculture. Hence, gene bank maintenance is vital.

**3. Plant Propagation:** Pollination in certain plants is performed by wild animals like birds; insects etc. and thus help in plants propagation, which is very essential.

**4. Cleaning of Environment:** Scavengers and decomposers are wild creatures (such as vultures, eagles, jackals, hyaenas, etc.) as well as microorganisms that feed upon dead animals, transform them into various nutrients, and release energy back into the natural environment, which results in an increase in the fertility of the soil. They perform very vital work by cleaning the environment; without their efforts, it is possible to speculate about what would happen to this planet.

**5. Scientific Importance:** For research purposes and studies of anatomy, physiology, ecology, evolutionary aspects.

**6. Soil Erosion:** Plant cover, litter, the mixing of litter caused by the movement of wild animals, and the transformation of litter by microorganisms into spongy humus all work together to thwart its growth.

**7. Economic Importance:** Timber, firewood, paper, gum, resins, tannins, various medications, essential oils, spices, silk, honey, hair, feathers, guano (the faeces of marine fishes used as fertiliser or the manure generated from fish), leather, musk, ivory, and other materials can all be acquired from wild animals. In addition to this, profits may be derived after the killing of wild animals through tourism, exports, the sale of hides and ivory, among other things; despite the fact that the activity is illegal under law but is not currently being carried out.

**8. Potential uses:** New foods and beverages (a beverage is a type of plant product that is used by everyone on a daily basis and contains an alkaloid called caffeine that has a stimulating effect on the human body; examples of such beverages include tea, coffee, cocoa, and so on) are derived from wild plants and animals in the same way that all cultivated and domesticated plants and animals are. In the future, it may be possible to acquire medicines and other valuable goods from wild animals. It is also fragmentary product of the plant.

## **BENEFITS OF WILDLIFE**

For a variety of psychological and sociological reasons, humans have traditionally been given a positive connotation when discussing wildlife and the natural world. A straightforward walk in the park while taking in the sights and sounds of various bird species invigorates us and helps us recharge our batteries. In addition to putting out a bird feeder in the backyard, we may sooth our frayed nerves by participating in other physically demanding activities such as canoeing, trekking, hunting, or even taking pictures of wild

animals. Animals have been of great assistance to humankind ever since prehistoric times, supplying not only food and clothes but also a source of revenue. According to a number of studies, woodpeckers have the ability to eradicate ninety percent of the codling moth larvae that live beneath the bark of trees. This highlights the relevance of wild animals and the environments in which they live for the maintenance of genetic diversity. As a result, regions in which agriculture, forestry, and fisheries are dependent on crops or stocks might take measures to guarantee that these living resources have sufficient quantities to endure the ever-growing list of dangers. Additionally, in the field of health, the creation of novel therapies and treatments is heavily reliant on species and the habitats in which they live. It is interesting to note that the majority of pharmaceutical products are the result of identifying or creating species of wild animals rather than discoveries made through the application of conventional chemical concepts. These days, the majority of pharmaceutical treatments include at least one component that is taken from a wild plant or animal.

The unique and varied collection of living things that may be found within an ecosystem or on our planet is referred to as biodiversity. It is a method for assessing the general state of ecosystems. The interaction between biodiversity and climate is a two-way street. Tropical environments sustain a large variety of plant and animal species, while arctic environments host a smaller number of species in their terrestrial ecosystems. The preservation of biological variety is essential to the continued existence of humans. The term "wildlife conservation" refers to the process of preserving, safeguarding, and rehabilitating endangered animals. The term "wildlife" refers to all of the free-living animals and birds that are found in their natural environments. On our planet, there are numerous unique species of animals and birds. Nevertheless, the strain brought on by an ever-increasing population has resulted in their demise.

There have been a lot of positive initiatives done to conserve endangered plants and animals together with their natural habitats in recent years. The purpose of protecting animals and their habitats is to ensure that future generations will have access to a natural environment in which to live. In addition, another one is to educate people about the significance of the animals that are still there. There are a number of government agencies devoted to the preservation of wildlife, and these organisations enforce policies that are intended to safeguard wildlife. The preservation of wildlife is also a priority for a diverse range of non-governmental groups. Many people dedicated to the protection of wildlife are doing research in various parts of the world to determine which animal populations require assistance. They frequently kidnap wild animals and raise offspring of them in captivity. This is done so that the population can become huge and varied. It is important to strike a balance between the need to conserve wildlife and other needs, such as those associated with hiking, camping, hunting, and other activities.

## **ECONOMIC BENEFITS**

At an early stage in the history of the United States, the economic value of the country's diverse wildlife consisted mostly of the plants and animals that might be utilised as a source of food and clothing. People were able to eat because of those who hunted, fished, and sold the meat they obtained. They collected wood for a dwelling and dressed themselves in furs obtained from animals that they had captured and prepared. Since then, there has been a significant drop in the practise of hunting wild animals for their meat or skins to make clothes. The lumber business relies heavily on trees that have been artificially grown in nurseries. Even while there is still a significant sector that harvests the oceans, natural resources are getting lower and lower. The economic advantage of wildlife is starting to go through a period of transition. The economic advantages of wildlife are shifting away from natural harvesting, and one change that is occurring is toward activities that take place outside, such as leisure activities. Fishing and hunting are two of the most important economic income generators in the wildlife business. Both of these activities provide a cash flow. It does not account for the 18 billion dollars that Americans spend year on activities such as wildlife

viewing. According to research conducted by the United States Fish and Wildlife Service, hobbies such as birdwatching are responsible for an astounding \$5.2 billion of that total. Additional hobbies that are enjoyed everyday by Americans include photography, watching animals, collecting zoological and botanical specimens, and simply taking in the beauty of the natural world. The growth of free enterprise is directly correlated to the expansion of recreational opportunities. Activities that include wildlife sometimes necessitate the production, distribution, and sale of new items. This leads in an increase in revenue due to the creation of jobs to fulfil that requirement. In order to successfully manage wildlife, it is necessary to have employees who have received appropriate training. There are many people in the world, yet not everyone works for a state or federal agency. The majority of these people work on their own as independent consultants, offering services such as pond management, habitat management, and species management. Consultants offer private landowners assistance in accomplishing their unique land management objectives. The capturing of wild animals continues to be the primary source of cash generated by wildlife-related activities. Every year, people spend money on activities related to hunting and fishing, such as the purchase of permits and leases, the acquisition of supplies, and the hiring of guides. Any activity that involves the taking of animal wildlife is included in the published regulations of a state, such as the Texas Parks and Wildlife Outdoor Annual Official Hunting and Fishing Regulations. One example of these regulations is the Texas Parks and Wildlife Outdoor Annual Official Hunting and Fishing Regulations. The trade in furs is an example of another economically viable use of wildlife. The pelts of the animals that are captured are what the trappers sell to customers. Some of the money comes from the selling of pelts, while others come from the sale of permits, traps, and materials for curing. It is important to emphasise that the practise of catching animals is very debatable and that it is not encouraged nor supported in this context. The decision to hunt furbearers is a personal one, but in the state of Texas, it must be cleared by the Texas Parks and Wildlife Department first. The harvesting of fur-bearing animals is regulated by regulatory authorities that are specific to each state. The economic value of untamed plants has been recognised by humanity for quite some time. Roughly ninety percent of the food crops that are presently farmed in the United States are descended from wild tropical plants. Various goods can be derived from wild plants as well as domesticated plants that originated from wild species. At a more substantial level, trees are a source of timber, paper, and rubber. Oils, colours, and fibres may all be extracted from some plants. Many kinds of legumes produce nodules that are capable of fixing nitrogen. These nodules add nitrogen to the soil, which in turn makes it more suitable for the cultivation of food crops. Pollination of plants by animals, such as insects and birds, contributes to the economic foundation. This action is necessary for a great variety of food crops. Pollination work in the United States contributes around \$30 billion yearly to the value of the nation's crops, making it one of the most important industries in the country. The appearance of anything more futuristic suggests that there is the possibility of developing computer chips by making use of protein molecules generated by certain saltwater bacteria. During the process of information storage and retrieval, the compounds alter their hue after absorbing light. It would appear that it is feasible to embed these chemicals into very small cubes that are used in computers. Memory storage may be increased by 1,000 to 5,000 times just by adding a single cube of 1 inch.

## **MEDICAL AND SCIENTIFIC BENEFITS**

The value that may be gained monetarily is only one aspect of the benefits that wild animal species provide. An estimated eighty percent of the population of the globe receives their medical treatment from plants or plant extracts. An annual value of around one hundred billion dollars is attributed to the genetic resources



of wild plants, the majority of which are found in tropical nations with lower levels of economic development. About forty percent of all medications, drugs, and pharmaceuticals fall under this category. In the United States, it is believed that anti-cancer medications, such as those produced from the pink periwinkle, save the lives of around 30,000 people each year. Under the tropical jungle of Madagascar, where its existence is in jeopardy, the rose periwinkle can be found. The most lethal kinds of cancer, lymphocytic leukaemia and Hodgkin's disease, are both treatable using extracts taken from the leaves of this plant. These two medications account for around 160 million dollars' worth of annual income combined. Only 5,000 of the world's 250,000 known plant species have been investigated by experts to see whether or not they could have any therapeutic use. If vulnerable habitats continue to be destroyed, such as the habitat of the rose periwinkle, it is possible that many species may become extinct before scientists understand the full extent of their potential therapeutic usefulness. According to the scientific community, every species is significant because it serves as a link in the bigger picture of an ecosystem. The evolution of life and its functions can be better understood if the scientists have a better grasp of the roles that different species perform in their respective environments. A glimpse into the past can very well provide light on the potential path that evolution might take in the future. Researchers lose access to important genetic information that has been accumulated over millennia as a result of evolution if species become extinct too soon. Once they are gone, today's technologies are permanently gone and cannot be replicated or restored. The biotic community as a whole relies heavily on plant life for its continued existence. The majority of animal species derive their nutrition from plants. Recycling the nutrients that are essential for agricultural production, plants also contribute to the fertility of the soil. Plants are responsible for the production of oxygen, the regulation of the water supply, and the storage of solar energy. It is because to the wide variety of plant and animal life that toxic compounds may be decontaminated and organic waste can be broken down. They have the capability of preventing the spread of diseases and controlling agricultural pests. Most crucially, they form the large gene pool that will be used in future phases of evolutionary development. It is essential that people realise that the diversity of plant and animal life include all bacteria, fungi, and insects that play a dominant role in the operation of natural ecosystems and provide assistance in their maintenance.

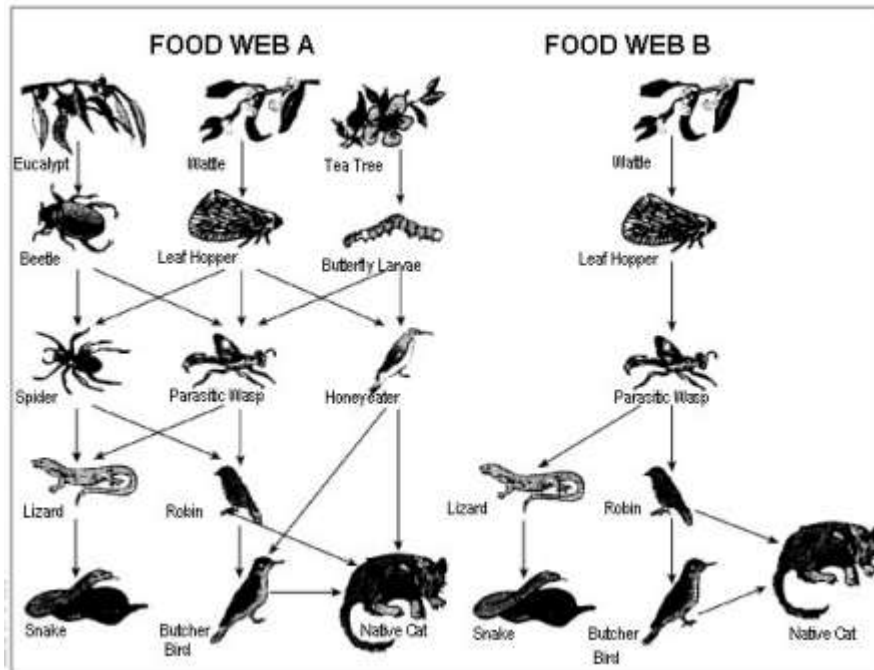
## **AESTHETIC AND RECREATIONAL BENEFITS**

Observing a herd of deer graze or the sun set is two examples of activities that have aesthetic value since they are enjoyable to look at. This aesthetic value can be attributed to wild vegetation and animals. They bring astonishment, delight, wonder, and pleasure to a great number of individuals all around the world. The term "wildlife recreation" refers to a wider range of activities than only those that involve hunting or fishing. People take pleasure in observing plants and animals in the environments that best suit them. Travelers pull over to the side of the road anytime they spot a wild animal moving through an opening or a plant with vividly contrasting colours because of this reason. The aesthetic value of wildlife overlaps with its recreational value. The appreciation of beauty is frequently what drives people to participate in leisure activities. A person delights in the sight of wild creatures living in their natural environment or views a landscape that has been artistically designed to be attractive to the eye. There is a strong urge to seize the moment and photograph it. As a result of the visual value of the environment, photography emerges as a viable option for a recreational activity. When word gets out about how beautiful a certain location is, more and more people want to visit that location so they may see it for themselves. Discovering new plant species that are not native to one's own region is something that many individuals look forward to doing when they travel. The sector of wildlife tourism, which is also known as ecotourism, is continuously expanding. This industry is responsible for up to \$30 billion in annual income in the United States. As was indicated before,

birdwatching is becoming an increasingly popular aspect of wildlife tourism. It is believed that fifty percent of people in the United States and eighty percent of people in Canada take part in outdoor activities such as birding, photography, or other similar pursuits. This is a far bigger number of persons than those who participate in hunting or fishing. After that, an animal will start to have more value as a tourist attraction than it will as a mount or pelt in the future. People are given the opportunity to witness non-native animals in an environment that is considered to be "near-native" when they visit exotic game ranches. There are others who prefer to view wild animal species in the environments in which they are naturally found. Hunting may bring in more money, but ecotourism has the potential to bring in more money for nations in the Third World, like as Africa. According to the findings of one piece of research, a male lion in Kenya would contribute \$515,000 to the economy of that country by the time it reaches the age of seven years old. If the animal were to be hunted, the tanned skin it sheds would have a worth of \$1,000. Based on the findings of the same study, an elephant that is 60 years old would bring in approximately one million dollars in economic revenue. There are certain drawbacks associated with ecotourism. The participation of fifty percent of the people in the United States and eighty percent of the population in Canada in ecotourism activities will have an effect on the ecosystems of the surrounding area. The aesthetic value of a resource region will decrease if there is heavy traffic of people in the area. There must be a middle ground between the positive and negative effects that human activity has on the environment. Denali National Park in Alaska is attempting to improve visitor management while preserving as much of the park's potential for pleasure as possible. The first 15 kilometres inside Denali National Park are restricted to those who are driving their own private vehicles. In addition to that, there are organised bus trips available. Caribou, Dall sheep, moose, and grizzly bears may all be seen by tourists riding on buses since they travel freely in their natural habitats without being disturbed. Visitors will have the opportunity to engage in activities such as hiking and biking. Regardless, the use of this management approach reduces the influence of humans, which helps to preserve the environment.

### **Biodiversity and the Natural Environment**

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### List of Major Threats to Wildlife

1. The destruction of natural habitats The amount of land that is suitable for habitation by wild animals is decreasing on a yearly basis as a direct result of human activity.
2. Variations in climate Because plants and animals are delicately balanced within their environments, any variation in the temperature would do them harm.
3. Toxic chemicals and pesticides: Certain plants and animals are rendered unable to thrive in an environment that contains pesticides. In addition to this, a large number of substances, such as mercury, by-products of the petroleum industry, solvents, and so on, are harmful to animals.
4. Hunting: Uncontrolled hunting poses a significant risk to animal populations. Mismanagement on the part of the Forest Department and the Forest Guards also contributes to the worsening of this situation.
5. The animal population is decimated by natural disasters such as floods, earthquakes, volcanoes, lightning, and forest fires, among other things.
6. Pollution: the introduction of hazardous substances into the natural environment poses a threat to a diverse range of living things.
7. Extinction brought on by overfishing The exploitation of natural populations for the purpose of obtaining food has led to the extinction of these species.
8. Unintentional killings Another potential danger is the unintentional killing of animals and birds.

### Steps Taken for Wildlife Conservation

There have been so many positive initiatives made to safeguard endangered plants and animals, in addition to the environments that they call home. The purpose of protecting endangered species and preserving



natural habitats is to ensure that future generations will have access to these natural resources. In addition to this, another one is to educate people about the significance of protecting wildlife. Numerous government agencies have been established specifically for the purpose of wildlife conservation, and these organisations are responsible for enforcing rules that are intended to save wildlife. The preservation of wild animals is also supported by a diverse range of private groups. Numerous wildlife conservationists dedicate their time and energy to tracking down endangered animals in every region of the planet. They frequently kidnap wild animals in order to breed them in artificial conditions. This is done in order to ensure a big and varied population. The necessity to conserve wild animals is also believed to be balanced with the needs of other activities and pursuits, such as hiking, camping, hunting, and so on.

### **Importance of Wildlife Conservation**

Some wildlife conservationists are making an attempt to conserve endangered species of wildlife and those species of wildlife that are on the point of going extinct as a result of the high degree of deforestation that is occurring. The following are some of the reasons why it is crucial to conserve wildlife:

1. Natural beauty: Wild animals, by virtue of the singular qualities they each possess, contribute to the earth's natural attractiveness.
2. Economic value: As it supplies many valuable substances, its economic value is important.
3. Scientific value: In the course of their research, scientists have accumulated a wealth of knowledge regarding a wide variety of plants and animals. Through research on various species of animals, they found important new medicines.
4. Survival value: Wild animals contribute to the maintenance of healthy ecosystems, which is essential to the continuation of life..

### **How Important Is Biodiversity?**

The human race relies on biodiversity for its most fundamental requirements, including food, shelter, and medical care. It maintains the ecosystems. It also works to clean the water and improve the soil. In addition to that, it shields us from storms and floods. It keeps the climate in check. It is of utmost significance. Is it necessary to take into account the plight of extinct or critically endangered plant and animal species at the expense of advancing the state of human and financial capital? At the expense of progress in both human and capital development, we have an obligation to give thought to the plight of extinct or critically endangered plant and animal populations so that we can meet our most fundamental requirements. As a result, it is imperative that we acknowledge the significance of biodiversity and make it our mission to preserve our natural habitats.

### **CONCLUSION**

The provisions of food, housing, and medical care that come from biodiversity are essential to human existence. It maintains ecological systems. The soil is improved, and the water is purified thanks to it. Additionally, it shields us from floods and storms. It acts as a climate regulator. It is of the utmost importance. Is it absolutely necessary to focus one's attention on the plight of extinct or critically

endangered plant and animal species in favour of advancing human and financial capital? In order to meet our fundamental requirements, it is imperative that we give some thought to the plants and animals that are in danger of extinction or are on the verge of extinction, even if this requires setting aside progress in human and financial growth. As a result, it is imperative that we comprehend the significance of biodiversity and be committed to the preservation of our natural life.

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