



Emerging Trends in the Field of Wildlife Preservation; A Review

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ABSTRACT

Issues of extinction, endangerment, and conservation of wildlife are discussed in length. The current situation regarding the preservation of animals on a global scale must be known. The best way to protect wildlife is to protect their habitats. Numerous initiatives and practices have been implemented to promote forestation and reduce deforestation. Equally important are efforts to reduce marine pollution by legislation and public education, as well as those to curtail the illegal pet trade, excessive shooting, and hunting.

KEY WORDS

Current trends, Conservation, Biodiversity, Wildlife, Habitat.

INTRODUCTION

In the current climate, protecting our planet's diverse ecosystems presents a significant obstacle. In today's rapidly evolving world, success demands the concerted effort of people all around the world working together (Claxton et al., 2011). There is a significant demand for a variety of planning solutions that can protect natural resources, help them be conserved, and reduce the amount of loss that occurs. The success rate of conservation efforts can be significantly improved by providing an indication of the conservation aims or endpoints as well as a warning that is site-specific (Williams et al., 2009).

Wildlife preservation is a response to the steadily growing pace of extinctions that have occurred lately. Some famous occurrences of catastrophe and near annihilation throughout the past centuries, including the dodo and the American buffalo, have brought attention to species decline (Whittington et al., 2007). The public has focused on large animals and raptors in this

century, with voluntary organizations working to preserve whales, lions, tigers, pandas, and eagles. However, this tends to approach the preservation of wildlife from a restricted viewpoint on vertebrate species, which runs the danger of ignoring the expanding concern about ecological structure. Focusing just on large, easily recognizable species will obviously be insufficient given the underlying aim of maintaining life in a natural condition, but it is a consequence of a consequentialist inclination. In other words, using public preferences as a guide for wildlife protection often results in a disregard for plants, reptiles, insects, and microbes. The dependency of the species mix of plants and animals in defining the environmental resilience of wildlife must be acknowledged to save such wild, untamed existence (Dudgeon et al., 2006). As a result, the concept of wildlife conservation has evolved from the preservation of important species in botanical gardens to the conservation of ecosystems, and the non-Governmental organizations involved in the field have changed from indifferent associations for the investigation of natural phenomena to active advocacy organizations for sustainability and the preservation of biodiversity. (Romach et al., 2016).

The world is endowed with a huge array of natural habitats that are home to a wide variety of wild plant and animal species. Nevertheless, a variety of global environmental changes, including land usage, desertification, deforestation, and climate change, have a detrimental effect on plant and animal life. The animal kingdom is currently facing serious threats; well over 1210 genera of mammals, 1469 species of birds, 2100 species of reptiles, and 2385 taxa of fish are in jeopardy (Blackmore et al., 2011)

Aims and Purposes

- To assess the various dangers that wildlife faces today.
- What are some of the more recent efforts that have been made toward the conservation of wildlife?
- Stress the importance of making the most of the efforts that can be made to save the species.

Principal reasons why species go extinct and others become endangered

- 1) The destruction of habitats and fragmentation of land
- 2) Wildlife Trades Based on Concerns on a National and International Scale
 - Commercialization of coral reefs.
 - The Business of Pets.
 - The Commerce of Human Organs.
 - The exchange of goods and services for medical research.
 - Trade with the Bushment.
- 3) Extraneous factors
 - Climate change and the warming of the planet
 - Air Pollution
 - The introduction of species that are invasive
 - Farmer or Rancher Killed in a Shooting

At an alarming rate, wildlife species are being eradicated or driven to extinction throughout Asia as a direct result of human persecution. Recently, studies on conservation and ecology that were published in primary journals have shown a bias toward study locations located in temperate and wealthy nations (De Silva, 2016). According to Edwards et al. (2011), Southeast Asia is regarded as having one of the highest levels of biodiversity endangerment of all of the world's hotspots. The principal dangers to Asian wildlife are the destruction of critical habitats and illegal hunting. Therefore, a longitudinal study is highly vital for the preservation, conservation, and management of wildlife, particularly in the case of illegal and legal trade, and to know about the fundamental population dynamics, related to long-lived species (De Silva, 2016). This is especially true in the case of illegal and legal trade.

Loss of Habitat and Fragmentation

The biggest danger to biodiversity is the loss of habitat (Segan et al., 2016). The human population has

increased at a rapid rate over the past two centuries, and as a result, to meet their requirements for land, farming, and urbanization, a significant quantity of natural vegetation has been degraded, which ultimately leads to deforestation all over the world (Dimobe et al., 2015). To ensure the survival of diverse life forms and ecosystems, The international community has acknowledged the crucial and important role that forests play and has prioritized the preservation and protection of forest biodiversity through a number of initiatives and agreements, such as the Aichi Targets and the Millennium Development Goal (Morales-Hidalgo et al., 2015). In 2010, the five parties to the Convention on Biological Diversity (CBD) came together to organize a purposeful plan for the years 2011-2020. Aichi's Target is the name given to this arrangement or strategy, and it consists of five different strategic aims. Accomplishing the first aim in 2010, which was "achieving a significant reduction of the current rate of biodiversity loss," was a step in the right direction. The management of twenty targets at the same time is a challenging task that places a significant strain on some Governments.

However, the rate of progress is modest; however, the 12th conference of the parties was convened in October 2014, and it was resolved to increase the rate of progress towards achieving the aim by 2020 (Marques et al., 2014). We can quantify the current area of forest that is dedicated to the preservation of biological diversity. This includes both the area of forest that is under protection and the forests that currently exist in the country and biomes. Recent research has shown that forests span approximately one-third of the land surface on Earth. These forests contain 80 percent of the planet's terrestrial biomass, and they are home to well over half of the planet's known terrestrial plant and animal species. Even though people all over the world acknowledge the importance of forests and acknowledge the fact that the amount of land covered by forests has been decreasing consistently owing to fragmentation, the amount of land used for agricultural purposes has been increasing in 70 percent of countries. It is estimated that global deforestation decreased by 16 million hectares per year during the 1990s and by 13 million hectares per year between the years 2000 and 2010. On the other hand, the 0.08% rate of loss that was reported for the years 2010 to 2015 is a tranquil issue of concern because there has been a huge loss in the area that has a high biological value. The primary objective of the Aichi Targets is to reduce the rate of deforestation and bring it to a halt or perhaps turn it around. This is because forests are home to a significant proportion of the world's known terrestrial species, and around nine percent of tree species variety is threatened with extinction at the present time. In addition to the Millennium Development Goal, the preservation of biological diversity is also of critical significance.

Because people all over the world are becoming more educated about the importance of biodiversity and woodland cover, there has been a significant advancement in the right direction towards attaining biodiversity conservation and minimizing the loss of forest goals; yet, this still appears to be a significant difficulty. Now, one of the key strategies for the century is designating protected areas; nevertheless, it is determined that a large number of valuable biodiversity regions are not covered as protected areas rank in a satisfactory manner (Morales-Hidalgo et al., 2015). According to Sloan and Sayer (2015), one of the primary concerns of environmentalists is to increase the total amount of land covered by forests (Floan et al., 2015). On a global basis, the Forest Resources Assessment, also known as FRA, provides possibilities to collect and analyze data. Because of this tendency, many of the factors that influence animal conservation are brought to light on a broad scale, and this highlights a wide variety of possibilities for the improvement and preservation of biodiversity. When analyzed in relation to other concerns (such as socioeconomic data), that offer an approach to the aspects that influence the conservation of forests at a large scale and suggest promises for improvement together in the conservation of forest and in following the rank of forests, which is very necessary for conservation (Morales-Hidalgo et al., 2015).

The World's Forests

In the year 2015, it was stated that the entire world forest area was approximately 4000 million Hec, but in the year 1990, there was a drop of approximately 3% from 4128 million Hec. The primary reason for this loss is a decline in the tropical domain, which is around 200 million hectares, whilst the expansion in the temperate domain, which is 65 million, is only partly responsible for it. According to reports from 2015, the

tropical domain has the highest percentage age of forest area, which is equal to 44% of the total, followed by the temperate domain, which has 26%. Comparatively, Europe has the largest forest cover at 25 %, followed by North America at 16 %, and South America at 21 %. Morales-Hidalgo et al. (2015).

Functions of Man-made Forests

The pressure that is put on existing forests is also reduced by the planting of new forests, which plays an important part in the preservation of biodiversity. A global assessment conducted between 1990 and 2015 found that the rate of deforestation fell while the rate of afforestation rose. The data from FRA (Forest Resources Assessments) and FAOSTAT show that if the amount of globally planted forests increases at a rate of 2.4% per year from 2010-2050, it may be possible to restore natural forests for fiber production in addition to timber production. At the moment, eighty percent of forests are contributing to output. This is consistent with the growth rate of 2.05% per year that was reported by the FRA for the period of 1990-2015 (Sloan and Sayer, 2015). At this point in time, there is a critical requirement for increased public awareness regarding the preservation of forests and wildlife. Because of this, tourism is the most effective method, particularly for students in high school, colleges, and universities (Thurstan et al., 2015).

Forests that have been designated as protected areas so that biodiversity can be preserved

Many protected areas across the world have been developed for the purpose of preserving the natural environment and ensuring the survival of animals (Dimobe et al., 2015). This is done in an effort to lessen the destructive effects that humans have on natural environments. According to the IUCN in FRA, “area especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources and managed through legal and other effective means is known as a protected area.” Additionally, “Forest area designed primarily for conservation of biological diversity that includes but is not limited to areas designated for biodiversity conservation within the protected areas is known as the area for conservation of biological diversity,” and “Forest area designed primarily for conservation of biological diversity that includes but is not limited to areas designated for biodiversity conservation within In 2010, a maximum of 86% of the forests that were designed for the preservation of biodiversity and were reported by 234 countries as being officially protected forests. Since 1990, the percentage of the world’s forest cover that is protected has increased to more than 80%, while the percentage of land devoted to the preservation of biodiversity has increased to 88%.

Some regions have vast protected spaces, but others, like Australia, Congo, Bolivia, Peru, Venezuela, and Mexico, do not publish information on their protected areas every year; as a result, it is difficult to compare these regions to one another, data comparing the years. There are a total of 651 million ha of protected forests, of which it is stated that in 2015 there was over 507 million ha of forest area that was protected. Over the course of 25 years, there is a protected area that has expanded in all climatic spheres, with the majority of the expansion taking place prior to 2010. From about 0% in the year 1990 to about 15% in the year 2015, forest land was preserved. Brazil, the United States of America, Indonesia, China, Congo, the Democratic Republic, Venezuela, the Bolivarian Republic, Canada, Australia, Peru, the Russian Federation, India, Botswana, Bolivia, the Plurinational State of, Zambia, and Thailand are on the list of top 15 countries that have recorded the greatest protected area in 2015. Other countries on the list include the Democratic Republic of the Congo, Congo, the Bolivarian Republic of, and Congo, the Democratic Republic.

The fact that certain nations failed to submit annual reports for the entirety of their participation disqualifies them. FRA has reported the biodiversity conservation area of 15 countries in 2015 (from 1990-2015), in the following order by year: United States of America; Brazil; Mexico; Russian Federation; Australia; Congo, the Democratic Republic of; Venezuela, the Bolivarian Republic of; Canada; Indonesia; Peru; India; Bolivia, Plurinational State of; Zambia; Colombia; Thailand; United Kingdom. According to Morales-Hidalgo et al. (2015), in 2015, areas totaling 427 million ha were designated as areas for the conservation of biodiversity across all countries. The total area was 524 million ha. Morales-Hidalgo et al. (2015). The main focus of

environmentalists is maximizing the amount of land covered by forests, but the most pressing problem is climate change. According to Sloan and Sayer (2015), political engagement stated that there is zero deforestation, and international funders repeatedly insisted that the amount of deforestation be reduced while simultaneously increasing the amount of afforestation (Floan et al., 2015). According to Assal et al. (2016), drought has been a major problem in recent years, and it has contributed to a rise in the death rate in the forests of western North America. (Assal et al., 2016) Because of human activity, grasslands and shrublands are losing their habitats at an alarming rate. In order to combat this decrease, Government agencies have begun to simulate natural processes through the use of human disturbances such as mowing and logging. Another step that has been taken toward better land management is the creation of a management database in the state of Massachusetts. This database will be responsible for tracking all land management operations carried out by state agencies. The significance of this resource cannot be overstated. Permit collaboration among various institutions and NGOs, and provide straightforward access to data in order to facilitate management initiatives (Schlossberg and King, 2015).

Trade on a national and international scale including wildlife

The illegal trade in wildlife poses a significant problem for the protection of endangered species. CITES, which stands for the Convention on International Trade in Endangered Species, is dependent on trade restrictions and regulations (Challender et al., 2015).

Coral Reef Industry (Trade)

Ornamental coral reefs wildlife transactions like those for jewellery, aquarium stock, and oddities bring in multiple millions of dollars for the sector. There is a lack of adequate management and regulation, as well as poor collection practices, which is endangering species of coral reefs that are already in a vulnerable state. CITES is the primary international framework that regulates the trade in coral reefs (Dee et al., 2014). This mechanism takes the form of an agreement between 175 different countries.

Industry of Pets

The unlawful trade in wildlife animals for the purpose of keeping them as pets is a concern for animal welfare and conservation on a global scale. There are a number of non-Governmental organizations (NGOs) working on a local, national, and international level to reduce this illegal trade. It is well known that there are 28 NGOs actively functioning in the Peruvian domestic market. In the course of an interview, it was discovered that only five non-Governmental organizations (NGOs) with a robust attitude towards the preservation of wildlife are making significant efforts to reduce this illegal trade in two regions of Peru. According to the findings of the interviews taken as a whole, the Government has a negligent attitude towards the legislation (Daut et al., 2015).

Commerce in Human Organs

Many wild animal species are hunted for specific portions of the animal's body that are utilized in various forms of traditional medicine and fetish practices all over the world. In addition, different parts of animals are utilized in many African cultural and traditional practices. Personal interviews with residents of 18 villages in the Cross River region of south-eastern Nigeria were carried out in 2015 with the goal of gathering data on avian mortality caused by human persecution for the purpose of commerce. According to the findings, there are 27 species of birds from 13 families that are used in regional commerce, and out of them, the top 5 are considered to be threatened species on a worldwide scale (Atuo et al., 2015).

Investing in biomedical research through trade

The use of animal species in biomedical research is governed by a large number of laws, regulations, conventions, treaties, policies, and organizations; however, there are additional restrictions for non-human primates. (Bayne and Morris, 2012). These requirements include political initiatives, medical demands, moral and ethical issues, social and cultural perspectives, and distinctions between species.

Commerce in Bushels

Local communities in tropical places consume around 5 million tonnes of bushmeat each year (Kanagavel et al., 2016). This is a significant part of the local economy. The actions of humans are of critical significance for the preservation of biodiversity. For the sake of the conservation effort, strict adherence to the conservation rules—such as a ban on hunting and shooting—is absolutely important. “Detection and understanding violation of conservation rules” are highly crucial because conservation is a very sensitive problem and victims are mute (Solomon et al., 2015). This is because conservation is a very sensitive topic and victims are silent. As a result of this, it is abundantly evident that there is a need to comprehend problems to better lodge complaints and effectually execute them (Challender et al., 2015)

International Agreements for the Standardization of Commercial Practices

CITES, which stands for the Convention on International Trade in Endangered Species, is an agreement between 175 countries that protects the biodiversity of animals. There are three different Appendices that contain CITES-protected species, each of which corresponds to a different level of protection.

Appendix I

Species that are both in danger of going extinct and susceptible to being exploited in international trade are afforded the maximum level of protection possible by virtue of this appendix. It impedes any and all foreign commerce that is conducted for commercial purposes. For instance, all international trades for jewelry and other forms of luxury goods are prohibited from involving the hawksbill turtle.

Appendix II

Is a list of species that are currently not in imminent danger of becoming extinct but are threatened by excessive human usage? The country that is doing the exporting will only give out export permits under the following conditions: (i) it must be determined by a scientific authority that the export of the particular species is necessary for its continued existence; (ii) the specimen must not have been taken unlawfully; and (iii) the living specimen must have the lowest possible danger of being injured or subjected to cruel treatment while being transported. It is home to around 30,000 different species, including every giant sea turtle, every seahorse, over 2,000 different kinds of hard corals, and three distinct hammerhead shark varieties.

Appendix III

Comprises those species for whom at least one member of the species has made a request for assistance in the form of enforcement from other CITES members. There were four different species of *Corallium* that were added to the CITES Appendix-III list in July 2008, along with export permission from China (Dee et al., 2014).

Other Explanations

There is a significant amount of anthropogenic pressure placed on natural biodiversity as a result of the growing human population, which is driving wildlife managers to reevaluate how they maintain and protect animals (Noor et al., 2016). SHOWS land degradation and deforestation (LDD) and loss of vegetation of cover for the sake of agricultural area in TWRB (Total Wildlife Reserve of Bontoli) in West Africa (Dimobe et al., 2015). [Note: TWRB stands for Total Wildlife Reserve of Bontoli].

Warming of the Planet and Shifting Weather Patterns

Between the years 1980 and 2000, there was a significant drop in the amount of salmon that were caught in Scotland due to several variables, one of which was the changing climate. Because of this, there was a relatively low abundance in the years 1991-1992 and from 1996-2003 respectively. During this period, the number of seals has been steadily decreasing. The environment is constantly shifting as a direct result of human activity, which ultimately results in the degradation of the ecosystem, the loss of habitat, and the fragmentation of existing habitat. According to Segan et al. (2016), it poses a significant risk to the biodiversity of the world. It is hypothesized that the probability of species extinction will increase as a result of climate change since temperature shifts play a significant role in the distribution and dispersal of species over time, and as global

warming continues to accelerate. According to the findings of a study on the endemic mountain species *A. quadra*, the population of this species is expected to drop by 85 percent by the end of the 21st century. The average temperature of the mountains is below 19 degrees Celsius, but if the temperature continues to rise in the future, these climatic conditions will shift to higher elevations, and *A. quadra* will confine its range to the highest possible area as a response to global warming. This indicates that there will only be a tiny portion of land that is appropriate for this species in the years 2050-2070 (Sobral-Souza et al., 2015)

It's a Pollution

A significant amount of trash has accumulated in the world's oceans as a direct result of human activity. This has created a significant issue for the organisms in the water. According to Hardesty et al. (2015), the introduction of polychlorinated biphenyls (PCBs) into the marine food web results in an increase in the mortality rate of marine mammals, fish, turtles, and seabirds (Hardesty et al., 2015). Additionally, organochlorine (OCs) and dichlorodiphenyltrichloroethanes (DDTs) are both hazardous pollutants that remain in the environment for an extended period (Randhawa et al., 2015). More than six million metric tonnes of plastic are thought to find their way into the oceans every year, and it is anticipated that this number will skyrocket over the next ten years. It is impossible to predict when it will degrade. There are around 700 marine species that are impacted by litter, and this number is consistently growing (Hardesty et al., 2015). The introduction of species that cause ecological damage An alien or invasive species that has been brought into a new ecosystem, either by accident or on purpose. It will compete for survival with the indigenous species that are found in that area, which will lead to mortality and a population reduction. A scientist developed a method that relies on the participation of volunteers to get rid of a dangerous invasive species in Scotland. According to Santangeli et al. (2016).

Poaching and Shooting by a Farmer or Rancher

Poaching is another illegal activity that poses a threat to the preservation of wildlife. As poaching is a significant risk to the preservation of wildlife, conservationists have advocated for improved methods of land management to reduce the severity of potential dangers (Piel et al., 2015). In light of the fact that there are currently no such laws in place for the conservation of species, an alternate strategy is being utilized. Wildlife farming refers to commercial breeding programs that reduce the amount of stress placed on natural populations (Tensen, 2016). The success of conservation efforts does not solely rely on ecological data; rather, it also requires public awareness and accurate predictions of the species that are the focus of the effort (Vincenot et al., 2015). The pangolin trade poses a significant risk to the survival of this species. Poaching of this species occurs primarily in China and Vietnam for the purpose of obtaining its meat and scales (Nijman et al., 2016).

CONCLUSION

The protection and preservation of wildlife is an extremely pressing issue on a global scale, particularly in Asia and Southeast Asia. According to all of the prior studies, the primary danger is the destruction of habitat. Deforestation needs to be cut down significantly if habitats are going to be saved. It has been estimated that the rate of deforestation has decreased from 1990 to 2015, while the rate of afforestation has increased over that same time period. Aichi's Target plan (2010-2020) and the Millennium Development Goal are two more important initiatives for the management of habitat. Since 2010-2015, a rate of loss of 0.08% has been documented, which is still an issue that needs to be discussed. The area covered by forests is continuously decreasing as a result of fragmentation. The FRA is quite active in terms of data collection and analysis; nonetheless, the cooperation of countries with the FRA is extremely vital to understanding and addressing difficulties. The illegal import and export of wildlife is the second most significant factor contributing to the extinction of species. These vocations are thriving at a quick pace as a means of income generation. The Convention on International Commerce in Endangered Species (CITES) is an international agreement that regulates commerce among 175 countries. However, there is not a strong implementation, and Governments display negligent behavior towards the implementation of norms and legislation. Because of the actions of

humans Climate change, sometimes known as global warming, and pollution are both increasing at an alarming rate around the planet. There are no further laws that can preserve the species, and the existing laws are not being enforced to a sufficient degree. In light of the current situation, there is an urgent requirement for strong laws, political initiatives, public awareness, prediction of targets, moral and ethical considerations, and, most importantly, cooperation between Government and non-Government organizations in order to conserve wildlife.

Recommendations

- It is recommended that additional study be conducted to bring attention to the existing problems with biodiversity, and it is acknowledged that some effort has been made towards the preservation of biodiversity.
- There is an urgent requirement for the Government and other stakeholders, as well as non-Governmental organizations (NGOs), to work together on the various programs that are concerned with the welfare of wildlife and the preservation of biodiversity.
- The Government ought to enact laws criminalizing the kinds of unethical behaviour that bring many forms of life to the brink of extinction.
- People need to be educated about the significance of biodiversity through the use of social media, printed media, and electronic media.
- Students at the elementary school, college, and university levels ought to be given the opportunity to participate in educational field trips in order to raise their understanding of the significance of biodiversity and the measures that are required to ensure its preservation.

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