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Scientific Wildlife Conservation: Concept and its Propagation

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Abstract

In recent years, global population paid a great attention towards wildlife conservation. However, considerable differences can be found in the prevailing concepts of wildlife conservation and wildlife welfare which include the reasonable and legal utilization of wildlife. The key to scientific wildlife conservation is the proper awareness and appreciation of the relationship between wildlife conservation and utilization, which forms the theoretical basis of holistic approach. As such, expansion of the concept of scientific wildlife conservation requires the propagation through several levels. Wildlife conservation researchers should be regarded as the most important propagators of scientific information, along with education in schools and universities of growing importance.

Keywords: Wildlife Conservation; Scientific Concept; Animal Welfare; Holistic Approach

Introduction

Wildlife conservation includes the preservation of both species and their diversity. Conservation education is aimed at increasing human awareness for conserving biodiversity through education and practical activities. Now-a-days, wildlife conservation has emerged as a significant social issue. However, there are considerable differences in the concepts of wildlife conservation, with several probable protection ideas currently debated. Some people believe that wildlife conservation should incorporate the protection of all animals. Furthermore, absolute conservation has strong public sensibilities, which can result in extreme wildlife conservation activities, thus animal welfare and rights. In contrast, others believe that wildlife conservation should be based upon scientific attitudes and strategies.

Absolute protection includes the random release of animals, which has led to the invasion of alien species along with weakening and hindering the process of wildlife conservation itself [1]. Since public attitude plays a very important role in the formulation and implementation of wildlife conservation policies, some problems that need to be solved in the construction of an ecologically-based civilization, are defining wildlife conservation, promoting scientific

wildlife protection, and encouraging an objective view of wildlife conservation by the population.

Importance of wildlife in development of human society

Wildlife have played an important role in the development of clothing, medical materials, experimental models and scientific research. Animal skins and fur have been used for clothing for millennia, and even today are symbols of fashion. Wild animals have also provided nutrition for humans, forming a significant proportion of our diet. The domestication and farming of wildlife, the advancement of feed technology, and the invention of meat and milk production can be considered the three revolutions of the human diet. These developments improved the fat and protein proportions in the diet, and enhanced the development of the human body and brain. At the early stage of *Homo sapiens*, wide-spread farming and agricultural production increased human food abundance and variety, which again contributed to an increase in brain volume. At the late stage of *Homo sapiens*, with the arrival of primary agriculture, animal husbandry, and the industrial revolution, the structure, habit, and concept of the human diet has inclined towards stability.

Humans and wildlife are closely interrelated, especially in regards to culture, traditional medicine, food, hunting, and eco-tourism. Therefore, it is not appropriate to separate wildlife from human. As it is socially and scientifically important, therefore, it is a matter of discussion that which concept of wildlife conservation is to be applied.

Scientific wildlife conservation

The concept of scientific conservation is the dialectical and objective understanding of the relationship between wildlife protection and utilization, which are intimate, and their division could impact the balance between humans and nature. Scientific conservation requires a rational view of animal protection and the scientific utilization of wild animals. It is not rational to oppose all activities in which animals are used in the name of animal protection, nor equate wildlife welfare to wildlife rights due to love and sympathy for animals. It is also not right to impose a personal choice on the public, which may result in distortion of public attitude for wildlife conservation.

The key to the concept of scientific wildlife conservation is to understand the relationship between the protection and utilization of wildlife based on holistic approach, which asserts that a system is an organic whole and each part cannot be understood separately [2]. From this viewpoint, the protection and utilization of wildlife are combined, not differed. However, wildlife protection and utilization are often incorrectly thought to be contradictory. The most typical example is wildlife hunting. The reasons why people disagree with hunting are based on a general lack of in-depth understanding. Well-organized hunting not only has ecological benefits, but also economic and social one. From the perspective of ecology, ordered wildlife hunting can help regulate a population.

Therefore, scientific wildlife conservation is very different from extreme conservation. Protection and utilization of wildlife are not separate entities. The relationship between wildlife conservation and exploitation needs to be treated dialectically. The opposite of protection is the destruction of wildlife and ecological imbalance, not the limited use of certain wildlife products.

Propagation of scientific wildlife conservation

It is difficult for most people to obtain detailed information on environmental issues. Scientific researchers are responsible for encouraging the public to understand the concept of biodiversity conservation [3]. As such, communication with the public must be effective, which requires active input from wildlife researchers and the development of effective methods to communicate with different people in regards to conservation education.

Sometime, people believe in wrong information and misconceptions, thereby ignoring scientific data. One possible solution is to help people to find out the root of problem and establish their values of environmental protection on the basis of scientific understanding [4]. An excellent scientific communicator understands that scientific data are often not effective to influence the public, so more specific and targeted strategies required. Conservation biologists should integrate the local culture into the overall planning of scientific communication, and not try to change belief and thinking by data alone [2].

Although environmental education has also shown a growing trend in certain developed countries, it is still limited due to poor access to educational courses [5]. Attitudes towards wildlife conservation are variable, and not necessarily scientific. Research has stated that wildlife conservation education for university students should include the concept of scientific wildlife conservation through a variety of practical platforms and curricula, which can be

incorporated into existing courses in schools and universities and spread through an interdisciplinary approach [6]. Publicity and education in schools can effectively enlarge the range of people interested and educated in the scientific protection of wildlife. It is not only the responsibility of universities to offer sustainable wildlife conservation courses, but also that of elementary and junior-senior high schools, which can lay a scientific foundation for sustainable wildlife conservation.

In addition to various conservation measures going on in our country, we ought to emphasize the importance of education and awareness more elaborately and effectively. There is an urgent need to identify areas of gaps even in the regime of research and management of wildlife. Being a large country, more coordinated efforts are needed for proper management and conservation of wildlife in India. Several exercises viz. preparation of National Biodiversity Action Plan (NBAP), cleaning of Ganges, Project tiger, Project crocodile, Project elephant etc. have not yielded desired results so far [7]. Here, the role of key organisations like Bombay Natural History Society (BNHS) Mumbai, Wildlife Institute of India, Dehradun etc. become very vital. The Ministry of Environment and Forests is doing good but much more efforts are needed to maintain the balance of nature.

Conclusion

Public awareness regarding the concept of scientific wildlife conservation is crucial for animal protection, and effective propagation of this concept has become a key issue in the field. The successful broadcasting of information depends on the devotion of time and energy to overcome the obstacles caused by different cultures, educational backgrounds, beliefs, economic status and regions.

Scientific wildlife conservation approach is needed to formulate policies to balance the country's development initiatives and nature conservation programs simultaneously.

Bibliography

1. Karanth KK., *et al*. "Examining conservation attitudes, perspectives, and challenges in India". *Biological Conservation* 141.9 (2008): 2357-2367.

2. Zhou XH., *et al*. "Concept of scientific wildlife conservation and its Dissemination". *Zoological Research* 37.5 (2016): 270-274.

3. Sunderland T., *et al*. "Bridging the gap: how can information access and exchange between conservation biologists and field practitioners be improved for better conservation outcomes?" *Biotropica* 41.5 (2009): 549-554.

4. St Clair R. "Words for the world: creating critical environmental literacy for adults". *New Directions for Adult and Continuing Education* 99 (2003): 69-78.

5. Cutter-MacKenzie A and Smith R. "Ecological literacy: the 'missing paradigm' in environmental education (part one)". *Environmental Education Research* 9.4 (2003): 497-524.

6. Sodhi NS., *et al*. "Biodiversity and Human Livelihoods in Protected Areas: Case Studies from the Malay Archipelago". Cambridge University Press, Cambridge, UK (2003): 478.

7. Has Y. "Conservation of avian diversity in India". *International Journal of Zoology and Animal Biology (IZAB)* 1.1 (2018): 1-2.