



A Review on Human-Mammals Interaction and Conflict

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ABSTRACT

Interactions between humans and mammals are a defining experience of human life. Humans have utilized mammals and their products for thousands of years. The spread of new inhabited places, accompanying facilities, and residential areas, which vary greatly depending on the species' original habitat, has destroyed large ecosystems. Mammals are used for various reasons including food, and medicine. Urbanization, industrialization, and hunting have damaged the mammalian landscape. These activities are the primary causes of mammal's extinction. Mammals have adapted to new habitats and diets, but some species have failed to adopt, and they are rapidly declining. However, in an increasingly urbanized and resource-constrained world, we need to learn how to manage the risks from wildlife in new ways, and to understand how to maximize the diverse benefits that living with wildlife can bring. Ethnomammalogy is the study of human knowledge of mammals and this field of research helps with mammalian conservation efforts. Habitat loss is a global issue that has got a lot of attention in the last two decades. Human actions have had a significant impact on the chemical, biological and physical structure of the Earth's land and water.

Keywords: Mammals, Ethnomammalogy, Food, Habitat loss, Human action.

INTRODUCTION

There are 4763 mammalian species globally, with 1137 of them facing extinction (Javid et al., 2014). Until the 19th century, human development was quite modest; exponential human growth was observed in the 20th century. By 2050, if current trends continue, the human population will reach 9.3 billion

(Brook et al., 2021). Because of the rising human demand for space, food, and medicine, a large number of people is frightening for variety (Azad et al., 2018; & Chughtai et al., 2018). During the past 10,000 years, forests have been changed into agricultural ecosystems (Evans et al., 2020).

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According to previous statistics, modern agriculture began in the mid-twentieth period, resulting in a conflict among humans and animals (Joseph et al., 2018).

Although higher agricultural yields and modern agriculture are prerequisites of the current day, species conservation is equally important at this time. Humans have largely superseded all types of ecosystems, and their importance in conservation cannot be overstated (Ayanlade et al., 2020). Human development has had a harmful influence on mammalian species all around the globe (Rich et al., 2017; & Altaf et al., 2018b), Aesthetically, economically and scientifically (Ijaz et al., 2020; Janovcová et al., 2019). The number of existing species is referred to as diversity (Gibb et al., 2020; & Altaf, 2016). Species are abundant in natural settings, while individual numbers are greater in human-modified landscapes (Barros et al., 2019; & Altaf et al., 2018b). There are around 1.5 million recognized species on the planet, with many more unidentified (Lewin et al., 2018). These species, including humans, interact with the environment in a variety of ways to provide the living systems on which they all rely (Almond et al., 2020).

Human-based impacts such as agriculture intensification, road accidents, industrialization, deforestation and urbanization (Chattha et al., 2017), and climate change impacts (Fatima et al., 2019) significantly impact mammals' diversity. Habitat loss and fragmentation, overexploitation and trade pollution and the invasion of alien species are all often mentioned causes of biodiversity loss. All of these factors are linked to unprecedented human population growth, technological modernization, and the erosion of customary and traditional beliefs, norms, and practices unsustainable land-use policies, economic development policies, and the misevaluation of biological wealth (Fonseca et al., 2021). Seven variables are proposed by the World Resource Institute (1992) as the underlying drivers of biodiversity loss. Human population increase and rising resource use are among them, as are

misunderstanding about species and ecosystems, ill-conceived policies, global trade systems, resource injustice, inability to account for the worth of biodiversity, and a complex combination of these variables (Woinarski et al., 2019).

Some species can adapt to their environment, while others become extinct (Nogués-Bravo et al., 2018). Biodiversity loss is a worldwide issue that has gotten a lot of attention in the last two decades or more. Human actions have had a significant impact on the chemistry, biology, and physical structure of the Earth's land and water. The 'human footprint on Earth,' as scientists call it, is eroding the planet's ability to sustain human existence and may result in the extinction of up to two-thirds of all plant and animal species by the second half of the twenty-first century (Zhu et al., 2018).

Ethnomammalogy

Traditional medicines that rely on animal products, particularly mammalian products, are extremely important to people (Vijayakumar et al., 2015; Altaf et al., 2017; & Ijaz et al., 2020), and many species of mammals are sold for medicinal purposes all over the world. Field-based surveys for recording historically employed varied kinds of animals and related cultural elements are common in ethnomammalogy research and study (Altaf et al., 2018; & Manzoor et al., 2018). Conservation efforts benefit from documentation of traditional ethnomedicinal knowledge of plants and animals. Mammalian species, for example, are traded for a variety of reasons. The study data on wild animals in these marketplaces, especially mammals, is critical for conservation managers and policymakers (Browett et al., 2020). As a result, data from rural and urban populations throughout the globe must be evaluated (Parsons et al., 2018).

The Conflict Between Human and Wildlife

The presence of herbivorous and omnivorous animals near forest environments has a detrimental impact on agriculture (Digun-Aweto et al., 2020; & Doherty et al., 2021). Similarly, mammalian predators prevalent in

nearby regions negatively impact household and commercial animals in rural areas (Hansen et al., 2020; & Schuttler et al., 2019). Mammalian pests wreak havoc on crops at night, whereas birds do it at dawn and twilight (Best et al., 2020). Herbivorous and omnivorous animals, including mammalian species, annually harm 14 percent of wheat crops and 24 percent of maize crops per hectare (Afsheen et al., 2020). In contrast, 2% of commercial and domestic animals have died due to predation by wild species such as wolves, lynx, brown bears, and leopards (Torres et al., 2018). These losses are the consequence of human-mammal conflict, which has resulted in the extinction of several mammalian species (Crees et al., 2019).

Mammalian Conservation

Despite the efforts of ZSP, TRAFFIC, FAO, CITES, IUCN, WWF, and governmental agencies to protect mammalian species, objective tasks have yet to be met (Friedman et al., 2018). To protect threatened species, National parks, Sanctuaries, Ramsar Sites, Wildlife Parks, Game Reserves, and Zoos are built (Cheng et al., 2021). With the founding of Yellowstone National Park in 1872, the history of national parks and protected areas in the United States started (Antadze et al., 2017; & Smith et al., 2021). The purpose was to protect the park's distinctive terrain from being purchased and exploited by the business sector. Later, the goal was to protect the land from human influence (Leung et al., 2018).

Pakistan has a diverse animal population, including 195 mammalian species (Altaf et al., 2018). There are several mammalian species that have threats. Snow leopard, Grizzly Bear, Black Bear, Common leopard, the Indus Dolphin, Indian pangolin, and a slew of other animals are on the IUCN's endangered species list (Chakraborty et al., 2021). Many scholars have studied Pakistan's variety and discussed the condition of mammals in various cities and provinces. Balochistan Black Bear (*Ursus thibetanus gerardiana*), Indus Dolphin (*Platanista gangetica minor*), Punjab Uril (*Ovis vignei*

punjabensis), Balochistan Dormouse (*Dryomys niethermeri*), and Woolly Flying squirrel (*Eupetaurus cinereus*) are among the species found in the region (Altaf et al., 2017).

Threats to Wildlife

In Western nations, the negative effects of urbanization have been briefly documented, but in Asia, evidence is scarce (Singh et al., 2021). Due to pressures like habitat loss (for the place, food, medicine, and so on), mammalian diversity has fast depleted (Ansari et al., 2021). Large animals, in particular, have fallen and been extinct in many areas as a result of human influences (Díaz et al., 2019).

Climate change significantly influences animal dispersion; such climatic changes mostly affect traveling animals changing their location (Nogués-Bravo et al., 2018). During the previous three decennia, most traveling animal species returned to their original habitat two weeks earlier for breeding purposes, owing to a rise in temperature. However, if the weather is quite cold, the leaning for slow arrival will intensify (Ijaz et al., 2020).

Until the industrial revolution, human civilization had a detrimental impact on variety (Almond et al., 2020). Brodie et al. 2015 have all documented the cost of angling and chasing, as well as the destruction of living places by cultivation, the use of defoliant and insecticides, and the release of other poisonous aggregates into the environment IUCN recorded 16,000 threatened species submissions, including 5,624 vertebrate species, 2,101 invertebrate species, and 8,390 plant species (Ijaz et al., 2020). In citified and sub-citified environments, where they thrive close to people, several species of flora and fauna have adapted to the new pressures, food supplements, killers, and risks (Antonelli et al., 2020).

Wolves were the least impacted by field change among the mammalian species we looked at, although other mammalian species today have smaller ranges than they did in the past (Shackelford et al., 2018). We have evidence of a difficult trade-off between

preservation and expansion, particularly in animals with significant dispersal and environmental systems with higher degrees of change (Shackelford et al., 2018).

The rapid expansion of the human population across the world has had a significant influence on variety (Ramankutty et al., 2018). Deforestation, climate change, pollution, habitat loss, and alien species invasion as a result of population growth are all examples of further negative consequences (Ellwanger et al., 2020; & Ijaz et al., 2020).

Large ecosystems have been degraded as a result of the expansion of new populated areas, related amenities, and residential areas that vary widely depending on the species' native environment (Khan et al., 2018).

The underlying causes of virtually all recent and decreasing mammalian species include population increase and related impacts such as deforestation and habitat loss, the spread of hunting, and alien species (Romero-Muñoz et al., 2021). Threat processes have varying intensities over the Earth's surface, and species residing in more severely damaged places have a higher risk of extinction (Hobohm et al., 2021).

Apart from the diverse estimated variety on this sphere, mammalian diversity is in danger (Singh et al., 2021). Manufactured influences are becoming increasingly prominent on most of the Earth's natural sources and ecological system (Bengtsson et al., 2019).

The global, national, and local attempts to regulate and minimize biodiversity loss have resulted from the push to protect biodiversity. These efforts have been focused on conservation in the natural environment (in situ conservation) or in a man-made habitat under man-made conditions (Tickner et al., 2020).

Perhaps such unique unified approaches to understanding the processes that regulate mammalian variety would be useful in preventing future diversity loss and depletion of environmental resources that mammals provide (Ferguson et al., 2020; & Van Oosterhout et al., 2021). Previous research has

looked at species-rank organization and procedures governing recent global mammalian disappearances using such word processing files (which are plentiful) (Koblik et al., 2020).

Infection may hasten the decline of a variety of mammalian species (Tidière et al., 2020); for example, the mortality rate in Lowland Gorillas due to Ebola which reached 90 percent in a few places hastened the shift from endangered to extremely endangered (Strindberg et al., 2018). Illness is also emerging as a new motivation for the rapid extinction of a few species (Lovich et al., 2018).

Following the advent of devil facial tumor disease, a contagious carcinoma that first appeared in 1996, the population of Tasmanian monsters has declined by more than 89 percent (Kattner et al., 2021).

Ecological Impacts of Mammalian Species

Mammals are widely recognized as playing an important role in a variety of environmental systems, including preying (Somaweera et al., 2020), browsing, and seed dispersal (Lacher et al., 2019; Magioli et al., 2021; & Muñoz-Gallego et al., 2019), and providing significant human benefit in the form of edible material, enjoyment and interests (Abas et al., 2019). Mammals have been a major forerunner for conservation efforts since they include largely attractive species (Seleteng-Kose et al., 2021).

CONCLUSION

Actual contact or conflict between humans and mammals studies described as human-mammals views among people that animals endanger something they care about (e.g., health, safety, food, property) (e.g., health, safety, food, property). People compete with wildlife for food and resources, and have exterminated hazardous species; co-opted and domesticated useful animals; and utilised a broad variety of social, behavioural, and technological measures to limit unfavourable interactions with wildlife. This battle has resulted to the extinction and decline of innumerable species and incalculable human fatalities and economic losses. Direct

confrontation of any form is unusual in referred to as human–mammals conflict, and when it did arise, it represented human–human disputes over how wildlife should be maintained. The moment may be right to designate a new discipline that brings together researchers and practitioners from diverse disciplinary backgrounds to solve human–mammals conflict and cohabitation.

Recommendations:

Recognizing that the inherent inconsistencies connected with the term, human–mammals conflict, have the unintended result of engaging animals in actively adversarial connections with people opens the door to other ways of framing disputes over biodiversity protection. We advise conservation academics and practitioners apply the humorous correction to poke the internal inconsistencies connected with human–mammals conflict and experiment with constructing a terministic screen from the label, human–mammals cohabitation.

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