

## Negative Impact of Rhesus Monkeys in some states of North India

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**Abstract :** Rhesus monkeys (*Macaca mulatta*) are primates, native to forest in Northern India. The population of monkeys has grown at an alarming rate during the last decade. Rhesus monkeys have been leaving forests and are constantly migrating to urban, semi urban and rural areas. Rhesus monkeys are very aggressive and unsociable towards humans. This wild species affects the life of human beings in the forms of physical attacks, damage to livestock, property, crops, etc. This is considered as HWC-Human Wildlife Conflict. Damage to human property & harassment by the rhesus monkeys are common occurrences in various parts of India. Due to intolerable activities, a majority of residents strongly believe that these monkeys are unwanted species than a species to be conserved. There have been several strategies to solve the problem in India.

**Keywords:** Rhesus Monkey, North India, Damage.

**Introduction -** Rhesus monkeys (*Macaca mulatta*) are native to mainland Asia. Their natural habitat spans across Afghanistan, Pakistan, India, Bhutan Nepal, Bangladesh Thailand and China. There has been consistent increase in rhesus monkey population over the years in some states of North India like Himachal Pradesh, Uttarakhand, Madhya Pradesh and Rajasthan. The rhesus monkeys are leaving forests and are constantly migrating to urban, semi urban and rural areas because of their shrinking habitat, and availability of delicious and easy food in urban areas. High levels of macaque aggressive towards humans are common in such places, leading to physical attacks and high level of stress posing risk to humans. The monkey menace is not restricted to crop raiding, biting and fear psychosis but it also includes raiding kitchens, breaking chimneys, breaking electricity bulbs, chewing internet and electric wires, bursting water pipes. City dwellers are also struggling to cope with monkey menace. According to the Primate Research Centre, Jodhpur, which is one of the three Union government-run institutes on primates, more than 1,000 cases of monkey bites are reported every day in Indian cities. 'Monkey Management' is one of the most challenging issues in North India. They have become a big nuisance. Human-monkey conflict has attained a serious problem.

**Rhesus Monkeys:** Rhesus monkeys (*Macaca mulatta*) are sand-colored primates. They are wild animals and very aggressive in nature. They are native to forest but also found coexisting with humans in northern India. They adapt to different environments; they are both arboreal and

terrestrial. They are usually medium sized monkeys at 18-22 inches in length, tail 8.27 -9 inches and 4-10 kg in weight. These wild and free ranging monkeys have life span of 25-30 years. They are found to be docile as kids but bad tempered as adults. They are omnivorous. They live in groups consists of several adults of both sexes and their young's. A social group of monkeys is made up of a few male adults, a number of females and their offsprings. They live in large families called troops. There may be 20 to 200 members in a troop. These troops are found in urban areas near human settlement, river side and forests. Their natural diet consists of fruits, seeds, roots, herbs and insects. In area of human habituation, they also eat crops and search through garbage for food.

**Population of Rhesus monkeys:** The population of rhesus monkeys has grown at an alarming rate during the last decade. According to the last count there were 50 million monkeys in India. This has resulted in their migration from the forest areas towards towns and cities and also to the cultivated areas. The rapid increase in the number of rhesus monkeys' population has led to increased competition for food & space between humans & monkeys.

**Rhesus monkey-Human Conflict:** When wild species affect the life of a human beings in the form of physical attacks, damage to livestock, property and crops, it is considered as HWC-Human Wildlife Conflict. Damage to human property & harassment by the monkeys are common features in various parts of India. It was reported by various people that they entered houses, stole food, clothing and other goods, uprooted vegetables and garden plants,

pulled on electric wires and TV antennae, threatened and attacked peoples, often causing serious bites. Rhesus monkeys are especially aggressive and unsociable towards humans. Due to their intolerable activities a majority of residents strongly consider the monkeys as unwanted species than a species of conservation. Damage and harassment caused by macaques is very common features that can be seen in many parts of India. They colonized area around the parliament and offices of the finance and defense ministries, frightening both civil servants and the public. They snatched food from people as they were walking, tore files and documents by climbing in through windows, according to the home ministry employee. Biting humans, destroying orchards crops and studding household things are the major damages caused by rhesus monkeys. Rhesus monkey learned to exploit human habitat.

**Damage of crop and biodiversity caused by Rhesus monkey:** In India rhesus monkeys cause significant damage to crops and gardens and have a part to play in economic loss. Farmers claimed 20 to 30 % damage to their crops has been caused due to monkeys. Many mango orchard owners claimed 20 to 25% annual damage to mango crops was due to these monkeys. Rhesus monkeys had been declared vermin in 93 tehsils of the state by the union ministry of forest, environment and climate in 2016. Later they were declared vermin in Shimla. The damage to the maize crop from monkey ranges from 20 to 90 %. They cause financial losses to farmers due to crop depredation. Besides of direct loss, they also cause indirect loss like feeding upon the fruiting trees and the flowers, which reduces the fruit production considerably. They cause severe threat of loss of biodiversity since they destroy biodiversity a lot. Rhesus monkeys eat tender leaves and immature leaves of plants and photosynthesis is seriously affected. They destroy the seedling of wild and cultivated plants in early stage. They pluck and uproot the plants. They eat unripe fruits of several plants therefore fruits not ripe on the trees for regeneration. Seeds and kernel of several plants are eaten up by rhesus monkeys therefore regeneration is seriously affected. They destroy the twigs and branches of trees and shrubs while jumping and playing. They eat flower buds and flowers of several plants therefore the development of fruits and seeds are seriously affected.

**Rhesus monkeys' bites and carriers of diseases :** High levels of macaque aggressive towards humans are common and cause high level of stress to humans. Sometimes people get fatally attacked by troops of monkeys hiding nearby. On an average 60 to 70 cases of monkey bites are reported monthly at two hospitals in Shimla, the Indra Gandhi Medical college and Deen Dayal Upadhyay hospital. Monkeys are carriers of rabies and other zoonotic diseases. B virus can spread from infected macaque monkeys to people and exposure can result in the transmission of the Herpes B viruses which has a 70%

mortality rate in humans if not treated immediately. Patients of rhesus monkey bites carry risk of tetanus, bacterial infection, rabies and herpes virus. The bite of rhesus can transmit Herpes virus that can cause a potentially fatal swelling of spina. In urban areas, these monkeys commonly carry viruses especially free ranging monkeys.

**Decisions on Rhesus monkeys taken by Government in North India:** During hearing of a public interest petition filed by the residents of New Friend colony in Delhi in 2000, Delhi high court banned feeding monkeys in public areas, and allowed municipal authorities to fine those who violate the directive and directed the government to round up monkeys from human habit actions and translocate them to the Asola-Bhatti wildlife Sanctuary on Delhi -Haryana border. The court also asked a special committee to explore the option of sterilization of monkeys. Rhesus monkeys has finally been declared as vermin in Himachal Pradesh. In December 2022, the center removed rhesus monkeys from schedule II of the wild life act. Stripped of the protection that comes with being labeled as an endangered species whose killing and hunting is illegal, rhesus macaques are now akin to stay cats and dogs. Himachal Pradesh has reported damage to life and property, including large scale destruction of agriculture by rhesus monkeys in areas outside forests and Central Government has considered it necessary to mitigate the damage to human life, crops and other properties of the state for ensuring conservation of wild life in forest. The state Government has officially informed the high court about the urgency of the situation. The government assured the court that it would collaborate to control the monkey problem. The notification was issued on May 2024 and the monkeys will be treated as vermin for a period of one year in 38 tehsils of 10 districts of Himachal Pradesh.

**Solution of Rhesus monkey problem:** Indian authorities have tried several strategies to solve the problem of rhesus monkeys. The management practices can be followed to manage rhesus monkeys in India particularly in North India. It involves both preventive and reactive management practices.

**1. Translocation:** Translocation of monkeys to forest areas can be successful technique for their rehabilitation. In 1995–2001 in orchards in Mathura District, India, found that rhesus monkeys *Macaca mulatta* reintroduced into forest patches without resident macaques along with other interventions, remained at their release sites for at least four years. A post-translocation study in 2001 confirmed that all of the 600 monkeys captured from 12 troops and translocated to eight different forest patches, had settled, were healthy, showed no signs of stress, and behaved normally.

**2. Preventing management:** Behavioral biologists and primatologist narrate that by offering food to monkeys, we accept the dominance of monkeys. So, the monkeys start

commanding us. All primatologists are against the feeding of monkeys in public places except within permanent shelters /parks specially designed for them. In Shimla municipal limits, under section 302 of municipal corporation Act. People offer bananas, gram and bread to monkeys along the roads. This often results into traffic jams and accidents. Installing of solar fencing, electric fencing (non-lethal), monkey repellent, monkey scare guns and laser guided alarm around the field installing motion-activated sprinkler system can startle and discourage monkeys from entering gardens. Monkeys have a strong sense of smell and be repelled by certain scents. Consider using citrus peels, garlic cloves vinegar-soaked rays placed strategically around gardens to deter them.

**3. Sterilization:** Sterilization can be a better option. The work carried out by the wildlife wing of the "Himachal Pradesh Forest Department" had a major impact on the control of monkeys throughout India and can be adopted. It is easily possible for one small team to efficiently sterilize at least 60 monkeys in a day. Himachal Pradesh has sterilised at least 1.4million monkeys since 2006 to 2018. As a result of the constant efforts put in by the forest department of HP, now the numbers of Rhesus macaques have started dwindling.



**Fig.1:encroachment of road**

**Fig.2:Destruction of biodiversity**



**Fig.3: Rhesus monkey Fig.4: Damage the crop**

**Conclusion:** Rhesus monkey are wild animals and they cannot be treated as pets. They are primates and native to

forest. They live in groups consisting of several adults of both sexes and their young ones. There has been consistent increase in population of rhesus monkey over the years. The rapid increase in the number of rhesus monkeys' population has led to increased competition for food & space between human & monkey. Destruction of habitats, overpopulation and improper disposal of wastes are major causes of human monkey conflict. In India rhesus monkeys cause significant damage to crops and gardens and therefore are responsible for economic loss in Himachal Pradesh, Rajasthan, Uttar Pradesh Madhya Pradesh and Delhi. The magnitude of the problem is so high that farmers have formed associations to raise their voice against rhesus monkey problem. They are observed to wreak havoc in major cities of northern India. Later they were declared vermin in Shimla. 'Monkey Management' is one of the most challenging issues the forest and wildlife managers of India are facing today. Sterilization can be a better option. Translocation of monkeys to forested areas can be a successful technique for their rehabilitation.

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