



Research Article

Study of man-monkey conflict and its management in Chitrakoot, Madhya Pradesh, India

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Abstract: The struggle between man and monkey has been an old problem. It is because of ever-increasing urbanization and other human activities which take a toll on forest and wildlife. As the urban area is increasing, the forest areas are decreasing. Therefore, the monkey habitation faces problems which results in man-monkey conflicts.

Keywords: Chitrakoot, Forest,

INTRODUCTION

Monkey is important components of the Indian biota, culture and its mythology believes the monkey god (Narasimmarajan *et al.*, 1995). Man-monkey association is as old as man's own existence of nearly 225 living species of non-human primates; three Indian species have become urbanized. They are the Rhesus macaque (*Macacamulatta*), the Bonnet macaque (*Macacaradiata*) and the Hanuman langur (*Semnopithecus entellus*). Human population growth and activities like deforestation, agriculture and

urbanization lead to an ever increasing encroachment and wildlife habitats. Reduction of wild animal's natural habitats altered into small marginal patches. Conflicts often occur when non-human primate's raid crops (Sharma *et al.*, 2011).

Monkey has always been intimately associated with the lives of the people of the Indian sub-continent. This relationship however can be amazingly variable in the Indian view the man-monkey relationship is very exceptional. On one side people kill and eat their flesh as food and consume blood as medicine, on the other side people keep them as pets, trained them to play and worshipped the form of Hanuman, the god of wind.

Urbanized population are provisioned frequently due to religious sentiment of people .So human attitude towards monkey differ from area to area and species to species, likewise monkey are not liked in the areas of massive agriculture, horticulture and other

plantations since they raid and damage the crop and orchards. In such areas they are considered pests (Roonwal and Mohnot, 1977) in another situation monkeys have become commensalism and competitors of human being in and around villages town and cities, these are urbanized monkey (Rajpurohit *et al.*, 2006).

MATERIALS AND METHODS

Study area

Chitrakoot is known as the religious cultural capital of India. The study was conducted in the Hindu religious place of Chitrakoot (Hanumandhara, Satianusuiya and Guptgodavari) where pilgrims visited to see natural beauty, cave or statue. The Hanumandhara (altitude 217metre, 25°09' N and 80°53' E) is hills and around its evergreen forest mainly *Anogeissuspendula* (Kardhai), *Boswelliaserrata* (Salai) and *Acacia catechu* (Khair) plants are found. The Satianusuiya (altitude 159 metre, 25°06' N and 80° 50' E) is also a hill and surrounded its different types of woody trees. The Guptgodavari (altitude 205 metre, 25°5' N and 80°46' E) is famous for their natural beauties and cave, the area is covered with shrubs dominated by a degraded, dry deciduous forest and open shrub with *Lantana americana* and bamboos. A natural water source is available in above all places throughout the year. Langurs feed on about 200 natural and cultivated plant species.

Study animal

In Chitrakoot *Macacamulata* and *Semnopithecus entellus* both monkeys are found. The study was conducted in hanuman langurs (*Semnopithecus entellus*) which is most adaptable, strictly vegetarians, feeding mainly fresh and mature leaves. They live in mixed

groups that range in size from 20 to 50 members. The social system of these animals can be both polygynous and unimale/multimale. The percentage of uni-male troops versus multi male troops and the corresponding number of extra troop band males varies from site to site. The uni-males bisexual troops are found in Satianusuiya. Some *Semnopithecus entellus* troops raid crops and orchards in the area but due to religious reasons they do not killed them. The animals are easy to observe since they are not shy and spend most of the daytime on the ground.

RESULTS

Hanuman langurs are accustomed to proximity with visitor's and some places (eg. Hanumandhara, Satianusuiya and Guptgodavari). They are more familiar with them and do not fear of human's beings. Hanuman langurs are well know that proximity to human beings can be advantageous since they can take food from visitor's and increasing their chances to stealing food items. Human's also attracted toward monkeys but humans don't understand the meaning of their different types of vocalizations, body postures and many facial expressions. On the other hand the hanuman langur that lives in forest area (before Satianusuiya temple) they don't come near the human being and can't receive food from human because they don't familiar with human beings. At the time of when chasing them away from the crop fields and gardens the adult langurs interacted more than the sub-adult, juvenile and youngster but when adult and sub-adult hanuman langurs were involved in a higher percentage of interactions also juvenile and youngsters participated in many interactions. The

infant langur run to mother when saw the human. The children of human beings are more attracted toward the animals to see their natural activities (eg. jumping, playing, grooming). Present investigations revealed that most of the Hanuman langurs show aggressive behavior toward children, to receive food items from them.

Causes of man-monkey Conflict in Chitrakoot

The man-monkey conflict occur when they tearing clothes, stealing food and other household articles, damaging human property, raiding crop on fields or gardens and bite the people on roads. In Chitrakoot there are following main causes may arise conflict;

- 1-They attack and biting the humans, to snatching food items (PRASAD) from pilgrims.
- 2- They entering houses and stealing households items and damages them.
- 3- The crop raiding of the hanuman langurs are originates the man-monkey conflict.

Management of the conflict

To use of preventive and reactive management method control the conflict with monkey. Under preventive method prohibited the feeding of monkeys in public spaces. Feeding of monkey in Chitrakoot is common practice due to religious and cultural practice widely prevalent. Residential places where the pilgrims stay these places must be monkey proof. Under the reactive management capture the monkey from public places and leave them into forested areas or other natural habitats. In forested areas establish permanently shelter and these spaces are full maintained with food and water facilities.

DISCUSSION

Every animals change themselves according to environment this capacity of animals is called adaptation. Primates (including man) have more adaptively animals, when man started migration from villages to towns; the cities began to arise and started urbanization. Human activities such as deforestation, agriculture and urbanization lead to an ever-increasing encroachment on wildlife habitats, reduction of wild's life habitat *Semnopithecus entellus* also migrate from forest to town's or toward temple, where pilgrims goes and they gave food items ,thus this species become urbanized. Any species didn't urbanized at a time but step by step, when a village become a town and a city neighboring troops gradually become adopted to live in urban conditions was acquired new habits and behavior patterns.

CONCLUSION

Crop damage caused by hanuman langurs and the consequently human-langur conflict in Chitrakoot area is frequent. Langurs damage a total of 10 cultivated crops, when natural food is in short supply, human food is a good alternative form of nutrition. Around 1.3% of the world's population, live in wilderness areas and this cause's natural habitat of hanuman langurs are shrinking as a result man-monkey conflict occurs.

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