

FOREST NOTES & OBSERVATIONS

(I)

MANAGEMENT OF LIONTAILED MACAQUE (*MACACA SILENUS*) IN RAINFOREST FRAGMENT OF WESTERN GHATS

Human impact on the environment often results in the loss of habitat. The remaining habitat is often patchily distributed. An isolated rainforest fragment, which is under private holding, sustains a population of about 80 individuals of the Liontailed Macaque (*Macaca silenus*), which is one of the most endangered primates in India, endemic to the Western Ghats. The wild population of the Macaques is estimated to be around 4,000. They are confined to a long narrow band of forests and the remaining habitat of the primate is highly fragmented, splitting the population of Macaques into about 49 isolated sub-populations (Molur *et al.*, 2003). Factors such as habitat fragmentation, reduced habitat area, isolation of populations leading to inbreeding depression and vulnerability to random events make the Liontailed Macaque a highly endangered species.

Joseph and Ramachandran (2003) provided estimates of population parameters of Liontailed Macaque in an undisturbed and contiguous forest of the Silent Valley in Kerala. Umapathy and Kumar (2000) have reported their occurrence and abundance in 25 rainforest fragments in the Annamalai Hills in relation to several ecological factors.

Study Area

The study was conducted in Puthuthottam Coffee and Cardamom Estate in Coimbatore District of Tamil

Nadu that covers a rainforest fragment (10°12' - 10°54' N and 76°44' - 77°48' E). The area has very high plant and animal species richness. Without much of an effort, traversing through the Pollachi-Valparai highway that bisects it into two unequal halves, many notable species have been noticed, among them Asian elephant (*Elephas maximus*), Gaur (*Bos gaurus*), the Malabar Giant Squirrel (*Ratufa indica*), Travancore Flying Squirrel (*Petinomys fuscicapillus*), Dusky-striped Squirrel (*Funambulus sublineatus*), Malabar Spiny Dormouse (*Platacanthomys lasiurus*), Nilgiri Langur (*Trachypithecus johnii*), endemic birds species like the Blue-winged Parakeet (*Psittacula columboides*), Malabar Whistling Thrush (*Myiophonus horsfieldii*). Great Pied Hornbill (*Buceros bicornis*) is a common sight, which is also reported to breed in the crevices of large trees in the Estate.

Observations

In its natural habitat, the Liontailed Macaque mostly lives in one male units with a mean group size of 18-20 animals (Kumar, 2000). In the Puthuthottam Estate, two distinct groups of Macaques—one group with 20 individuals and another with about 60 individuals—were observed. The animals were not shy of inquisitive human beings, as they carried on with their activity. Even mothers with very young babies clinging on to their belly were also not very wary of human beings. The Macaques were observed feeding on *Artocarpus*

heterophyllus, *Persia americana* and *Ficus glomerata*, and grubs and insects taken from the dead branches, barks, foliage and tender leaves of *Erythrina indica*. Though more arboreal in the closed canopy forests of their natural habitat (Joseph and Ramachandran, 2003), at places the Macaques had to descend from one tree and walk on the floor of the plantation to gain access to other favoured trees.

Many of the trees were found girdled, heralding death of these over a period of time. It is not difficult to imagine that once the trees fall down, they would be gradually extracted for fuelwood and for other purposes by the local residents. As such, the Macaques are living in an open canopy forest fragment, and further loss of trees would have serious repercussion on them.

There is already a booming ecotourism, as people from far and wide come to see this charismatic primate, which is hard to sight in its present inaccessible natural habitat. Such unregulated ecotourism also would adversely affect the Macaques. The flesh of this Macaque is considered to be a cure for asthma and other ailments, and hence the animal is

persecuted. It was heartening to know that there was no hunting pressure in the Puthuthottam Estate.

Discussion

The Liontailed Macaque is an animal with low birth rate in the wild compared to other Macaques (Kumar, 2000), a factor that does not augur well for the species, whose population is declining in forest fragments and outside protected areas (Molur *et al.*, 2003). The rainforest fragment at the Puthuthottam Estate, if managed carefully, would serve as an ideal complementary habitat for the main population of the Macaques in nearby the Indira Gandhi National Park and Wildlife Sanctuary, and over a long period of time, it would help manage a genetically heterogeneous meta-population of the Macaque in the Annamalai Hills of Tamil Nadu. The Macaque and the species-rich rainforest fragment makes a stark contrast with the tea plantations, and reminds us that economic progress almost always comes at the cost of nature. It is worth spending at least a small portion of the revenue that the economic plantations at Valparai earn, for the conservation of the Liontailed Macaque.

References

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