



4-9 August, 2002, Beijing, China

ABSTRACTS  
THE XIXTH CONGRESS  
THE INTERNATIONAL PRIMATOLOGICAL SOCIETY

# aring for Primates

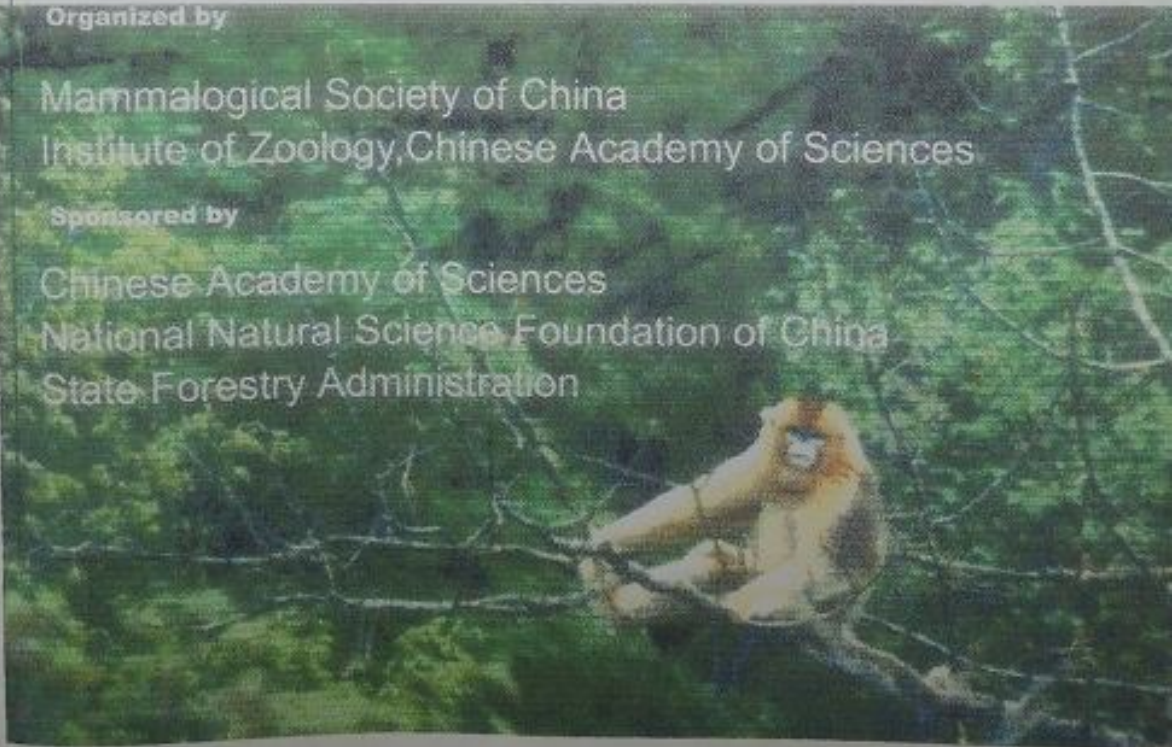


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*Caring for Primates*

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POPULATION ECOLOGY OF *MACACA ASSAMENSIS* MCCLELLAND, 1839 IN DARJEELINGSangita Mitra<sup>1</sup> and J. R. B. Alfred<sup>2</sup><sup>1</sup>Zoological Survey of India, 32A HaraMohan Ghosh Lane, Calcutta-700085, INDIA,

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Key Words: Assamese, Darjeeling, Focal

Investigations were carried out on the free ranging groups of Assamese macaque (*Macaca assamensis*) during 1996-99 in different parts of Darjeeling district in West Bengal. Observations were made on several aspects like group size; group composition; natality; mortality; sex ratio; growth rate; group size regulation and population density. Methodologies adapted in the present study are the long-term monitoring of the focal groups along with ad-libitum observation of all the other groups and the biannual census survey of all the sighted groups.

Of the 26 recorded groups, 22 were fully counted and 13 were selected for long-term monitoring including 2 focal groups for intensive study. Analysis of the entire data suggested an average group composition of 13-14% adult male, 39.18-40.71% adult female, 23.6-26.5% juvenile and 20.76-22.14% infant with an average group size of  $19.48 \pm 2.28$  ( $N=13$ ) and adult male to adult female ratio of 1:2.88. Minor variations were recorded over the study period depending upon various ecological factors and the juveniles of the focal groups showed the highest variation (S. D.  $\pm 1.7$  and  $\pm 2.94$ ). The study revealed certain part of the district showing a higher population density compared to the others.

Factors like natality, mortality, age structure and growth rate influenced the population dynamics. Overall growth rate declined ( $0.87/\text{individual}/\text{year}$ ) during the study period but per capita growth rate in the focal groups was insignificant ( $P < 0.05$ ). Natality figured between 50 and 71.4% in this study. Mean natality recorded in the study area was  $0.53 \pm 0.01$  ( $N=13$ ) which was variable (S.D.  $\pm 0.31$ ) in groups undergoing high anthropogenic pressure. Cumulative effect of various mortality factors like natural death (due to aging or diseases), predation by dogs, accidental loss (electrocution, run over, natural disaster etc.) and victim of human abuse resulted into an overall decline ranging between 4% and 6% in this habitat. In spite of a high reproductive potential, the status of this species in India has been of increasing concern due to habitat modification and consequent decline in wild populations over the last few decades.