

A COMPARISON OF FEEDING HABITS OF TWO TROOPS OF THE  
TOQUE MONKEY (*MACACA SINICA*, LINNAEUS 1771) LIVING IN THE  
UDAVATTEKALE RESERVE FOREST.

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## ABSTRACT

Feeding behaviour of the Toque Macaque (*Macaca sinica*) was compared for two troops of the Udavattekal Forest Reserve and adjacent areas. Troop size, use of home range, food availability within the forest and provisioning by people in the Udavattekal surrounds were analysed in relation to the feeding behaviour of the two study troops. Statistical analyses were carried out to determine a) variation in feeding behaviour between troops, in daily feeding for each troop, and at specific times of the day for each troop b) variation in feeding behaviour by type of food for each troop and between troops c) variation in floral species diversity between resting sites of the troops d) variation in human attitudes towards Toque Macaques.

Troop sizes of the study troops A and B were 106 and 73 respectively. Density per unit area of Troop A was 6.23 macaques per ha, while this was 4.86 macaques per ha for Troop B. The home ranges of troops A and B were 17ha and 15ha respectively. Utilization of the forest during the day was 29% for Troop A and 17% for Troop B. Both troops came out of the forest between 7-8.00a.m. and returned to the forest between 5-6.00p.m.

Peak feeding times(11-11.30a.m. and 1.30-2.00p.m. for Troop A; 10.30-11.00a.m. for Troop B) for both troops were suggestive of provisioning by humans. Peak feeding time for Troop B on food other than that obtained from natural food sources coincided with normal peak feeding time, while Troop A recorded a different peak feeding time for the same(1.30-2.00p.m. for food other than natural plant food).

Time of feeding had a significant effect on feeding behaviour for both troops, suggesting

the presence of particular peak feeding times. The feeding activity of Troop A was significantly higher than that of Troop B. Feeding behaviour varied significantly between troops with time of feeding. There was a significant variation in feeding behaviour between troops in daily feeding at specific times of the day.

Feeding activity of Troops A and B constituted 49.5% and 46.4% of natural plant food items respectively. Leaf buds of Jak, Sapu, Mango, and Wild lemon and seeds of kitul, Sapu, and palm were consumed most often by both troops. Of the provisioned food items, the consumption of fruit(provisioned), rice, vegetable ends, and rice was significant.

There were 33 species of trees in the transect of Troop A, while Troop B recorded 29 species of trees within its transect area. The most abundant tree species in the transects of Troops A and B were *Alstonia macrophylla* and *Swietenia macrophylla* respectively. Floral species diversity between resting sites of the study troops was not statistically significant. Fruiting trees preferred by the Toque Macaques were absent in both resting sites. Human attitude towards the Toque Macaque was statistically significant indicating a growing dislike towards the Toque Macaques.

It is suggested that fast growing fruit trees could be grown within the Udavattekal Forest Reserve to increase food availability for the Toque Macaque within the forest. It is also suggested that a pilot study be conducted at Randenigala Sanctuary on the feasibility of translocating some troops from Udavattekal to Randenigala. Several troops of Toque Macaques already exist at Randenigala and its proximity to Udavattekal compared to other areas inhabited by Toque Macaques makes it practicable.

