

A NOTE ON THE PRIMATES OF TAWANG DISTRICT, ARUNACHAL PRADESH

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INTRODUCTION

Arunachal Pradesh, the land of dawn-lit mountains with all its forest and wildlife resources sequesters at the farthest point of the north-east region of the country. Tawang, one of the ten districts, appearing just like a speak of the vast stretch of its state's terrain is situated at 90°45' to 92°15' N latitude and 27°22' to 27°45' E longitude with an area of 2085 sq. km. Tawang, the westernmost district of the state; two-third of the area is of high mountaneous region bounded by China (Tibet) in the north, Bhutan in the south-west and West Kameng district (AP) on the east accommodates only 28,287 human population (2001 census). The climate of the district is of temperate nature, moderate in summer and remain much below the freezing point during the winter. Rainfall in the district reasonably high during monsoon (May to September). Steep high mountaneous ranges run elsewhere in the plummer down to the green valleys where they together with other tributaries finally meet the Brahmaputra river. Forest is the main economy in the state, but Tawang depends mainly on agriculture and tourists. The district has only one social forestry division with two forest ranges and five non-account beats. There is no Reserve Forest and no Protected Forest in the district. Recently two Anchal Reserve Forests have been proposed comprising of 405 hec. of land.

No wonder the state has been a dream of naturalists. Many a number of expeditions, surveys have been undertaken by the naturalists of national and international levels. But possibly, no attempt on primates survey have been made in the district of Tawang. Therefore, keeping the view in mind, a preliminary survey to the montane forests and river valleys in the south and north-west parts of the district has been carried out during the month of May, 2002. The monkey groups that were encountered during the survey was Assamese macaque, *Macaca assamensis*. The other primate species which occur at Tawang is capped langur, *Trachypithecus pileatus*, which inhabits in the inaccessible terrain and rarely come in the villages or roadside forests at lower elevation. They are shy but true arboreal in the district. The "Pere Davis" macaque, *Macaca thibetana*, endemic to China to E. Tibet, Szechwan to Kwangtung (Pocock, 1939) and the Stump tailed macaque, *Macaca arctoides*, reported to occur at Tawang, could not be located in the present survey even inquires from local people and Forest Department not confirmed its presence in the study area.

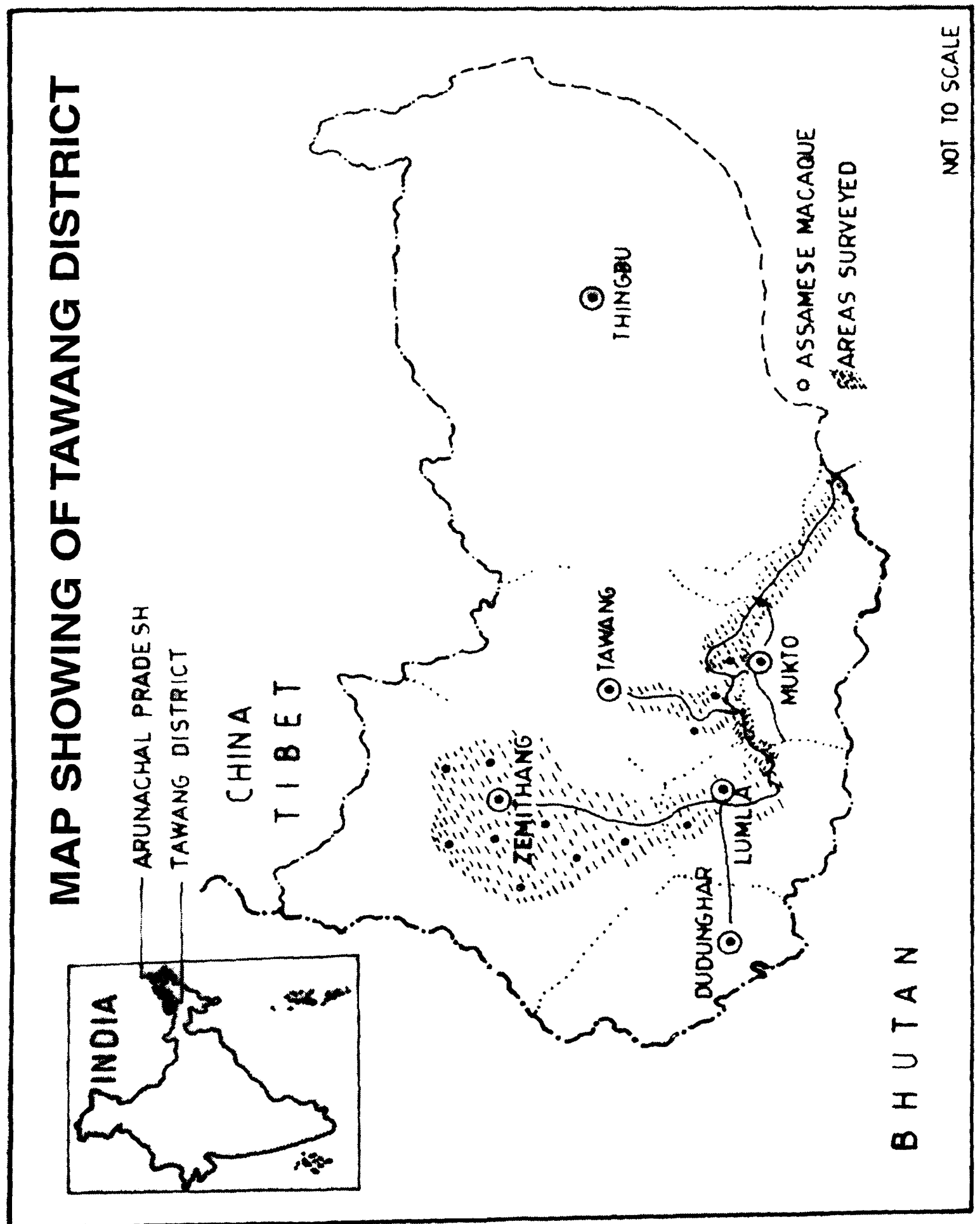
However, the occurrence of Pere Davis macaque can not be ruled out at this stage till a detail investigation is made.

The characteristic physical appearance of the Assamese macaque at Tawang was close to description of other authors (Pocock, 1939; Roonwal and Mohnot, 1977). The monkeys were bigger in size and dark coat colour at Tawang as compared to individuals seen at lower elevation might have confused the observers reporting the possible occurrence of a new species. A perusal of literature revealed that *Macaca assamensis* inhabits the foothills of the Himalayas and adjoining mountain ranges in south Asia (Hill and Bernstein, 1969; Fooden, 1989). The Assamese macaque belongs to sinica group of macaque together with *Macaco sinica*, *Macaca radiata* and *Macaco thihetana* (Fooden, 1982).

The present survey revealed that Assamese macaque population is fairly common in the south and north-western parts of Tawang. This monkey inhabits in the montane forests. As the terrain is highly undulating, point method mostly followed for locating monkeys. Transect was not found suitable due to the nature of terrain, so that count and sweep sampling method were followed at river valley basins. About 70 sq. km. was searched mostly on foot in roads and walking trails in forests and using a slow moving vehicle on roads. Assamese macaque were encountered from Lumla to Zemithang and between Jang and Tawang (Fig. 1). All the groups were bisexual and composed of adult males, adult females, juveniles and infants. Areas surveyed and location of monkeys were shown in fig. 1. The distribution and social structure of this species that were recorded shown in table 1.

During the survey 12 groups of Assamese macaque were sighted in forest habitat and roadside forests. The 12 groups of monkeys composed 320 individuals of which 39 were adult males, 184 adult females, 57 juveniles and 60 infants. The group size varied from 17 to 47 individuals. The average consisted of 3.25 adult males, 13.66 adult females, 4.75 juveniles and 5.0 infants (Table 1). The sex ratio of adult male to adult female was 1 : 4.2 and adult female to juvenile and infant were 1 : 0.35 and 1 : 0.37 respectively. Maximum concentration monkeys were recorded in and around Zemithang, the north western part of the district. Out of 12 groups 8 groups were sighted at Zemithang areas with a total 221 monkeys. The percentage composition of the monkeys were 10.86% infants. The sex ratio of adult male to adult female was 1 : 4.67 and female to combined juveniles and infants was 1 : 0.76. The sex ratio of adult male to adult female at Zemithang groups was higher than the groups of other areas. The 320 monkeys counted at Tawang district which consisted of 12.19% adult males, 51.25% adult females, 17.81% juveniles and 18.75% were juveniles and infants respectively.

The Assamese macaque of Tawang frequently invaded the cultivated fields causing much damage of the standing crop and vegetables. Due to advantage of valley and river the people of Zemithang areas produce rice, wheat and vegetables more than other parts of the district.



Figs. 1. Distribution of assamese Macaque in survey areas.

Table 1. Group size and composition of Assamese macaque at Tawang district.

Sl./Group No.	Location	Total	Adult Males	Adult Females	Juveniles	Infants
1.	5 km from Gipsu near BTK.	25	4	12	5	4
2.	12 km South of Luma to Zemithang	20+	3	10	4	3
3.	6 km from Jang to Bomdila	35	5	19	7	4
4.	Lhou village 12 km from Tawang to Bomdila	19	3	11	2	3
5.	Muchuk, Zemithang	47	4	20	13	10
6.	Muchuk, Near foot bridge, Zemithang	32	3	15	6	8
7.	Player falls, Zemithang	23	3	12	4	4
8.	Gorsum, Zemithang	17	2	10	2	3
9.	Kharman, Zemithang	26	3	14	4	5
10.	Lumpu, Zemithang	19	2	11	2	4
11.	Umpo, near Zemithang	35	4	18	5	8
12.	Socksant Village, near Zemithang	22	3	12	3	4
	Total	320	39	164	57	60
	Average	26.67	3.25	13.67	4.75	5.0
	%	—	12.19	51.25	17.81	18.75

Ready availability of food and good shelter in the hill forests may be the reasons for more concentration of monkeys in these areas. The people of Tawang are much tolerant towards the monkey menace of the fact, they are Buddhist in faith moreover the 6-th Dalai Lama was born at Urgelling Village near Tawang. Perhaps for these reasons we did not come across any hunter and there was no killing record of monkeys those to be very common in other parts of Aruihachal Pradesh. This preliminary survey in some selected areas of Tawang district revealed that a good number of monkey population still exists there.

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