

GOLDEN LANGUR *TRACHYPITHECUS GEEI* THREATENED BY HABITAT FRAGMENTATION

Anwaruddin Choudhury

*The Rhino Foundation for Nature in NorthEast India, c/o The Assam Co. Ltd., Bamunimaidam, Guwahati, Assam 781021, India.
Email: badrul@sancharnet.in, badrul@sify.com*

Abstract

The Golden Langur *Trachypithecus geei* is a rare colobine monkey with a very restricted range being confined to western Assam in India, and Bhutan only. At the time of discovery in early 1950s, it was believed that it is confined to the forests along India-Bhutan border only but in fact it was found all over the western Assam as is apparent from its present extent of occurrence. The Golden Langur is in real danger all over its range in India. Never before had it faced such dangers — from rapid loss of habitat, occasional poaching and unreported accidental deaths. Although the local tribes, mostly Bodos usually do not kill langurs but some new generation youths have taken up for its meat. Some langurs even started raiding crops due to loss of habitat. At least 19 fragmented areas now hold the species, which was originally a single habitat. Except for Manas, Ripu and to some extent Chirang, the remaining populations have no link with the larger and more secure Bhutanese populations. Many of these fragmented populations have little possibility of long-term survival. There is an urgent need to put a halt to all encroachments and illegal felling. The remaining forest in Chirang, Ripu and parts of Manas Reserved Forests, and Bhairab Pahar-Nakkati should be brought under protected area network. Chakrashila Sanctuary should be extended to include the adjacent forest pockets such as Katrigacha, Nayekgaon, etc. Isolated langurs, e.g., in Sarpamari and Srigrām Reserved Forests, which have no future, should be relocated in larger areas such as Chakrashila, Manas or Chirang. Since this is the only Golden Langur area in India, these steps should be taken on a priority basis.

Keywords

Golden Langur, Trachypithecus geei, habitat fragmentation, threats, northeastern India

Introduction

The Golden Langur *Trachypithecus geei* is a rare colobine monkey with a very restricted range being confined to western Assam in India, and Bhutan (Gee 1964; Choudhury 1988a, 1989, 1990). Within India, its entire population is restricted to parts of western Assam where it is bounded by the rivers, Brahmaputra in the south and its tributaries, the Manas and the Sankosh towards east and west respectively. Inside Bhutan, however, its east-west spread is more. Its distribution has been mapped (Choudhury 1992, 1997). In Bhutan, it is well secured as its habitat is still large and contiguous, no poaching or capture and large populations occur in the Protected Areas (Royal Manas, Black Mountains, Trumshingla and Phipsoo).

The habitat of the Golden Langur in Assam is tropical semi-evergreen and tropical moist deciduous forests. However, it favours the former type more. It occurs from flat plains to low hills inside Assam while inside Bhutan, it was recorded up to about 3000m (S.S. Saha, pers. comm.).

Distribution – past and present

When it was discovered in the early 1950s (Gee, 1964), it was believed to be confined to the forests along India-Bhutan border only. In fact, E.P. Gee had to travel to a remote corner near Jamduar to discover it while it was there all over western Assam as is apparent from its present extent of occurrence (Fig. 1a). Figure 1a shows its approximate distribution since the 1970s and note the fragmentation that took place over the years (Fig. 1b). However, its distribution is still spread across all the three districts of western Assam, viz., Bongaigaon, Dhubri and Kokrajhar, which were parts of erstwhile, undivided Goalpara District. The present Goalpara District is confined to the south bank of the Brahmaputra River and the Golden Langur is not found in this area. There are occasional reports of sighting from Garo and Khasi Hills of Meghalaya, Barail Range in southern Assam and so on but all were actually misidentification of Capped Langurs *P. (=T) pileata*. At a few sites in Goalpara-Garo Hills border, Golden Langurs are occasionally met with

Manuscript received 14 July 2001; Revised manuscript received 11 October 2001; Accepted for publication 29 November 2001

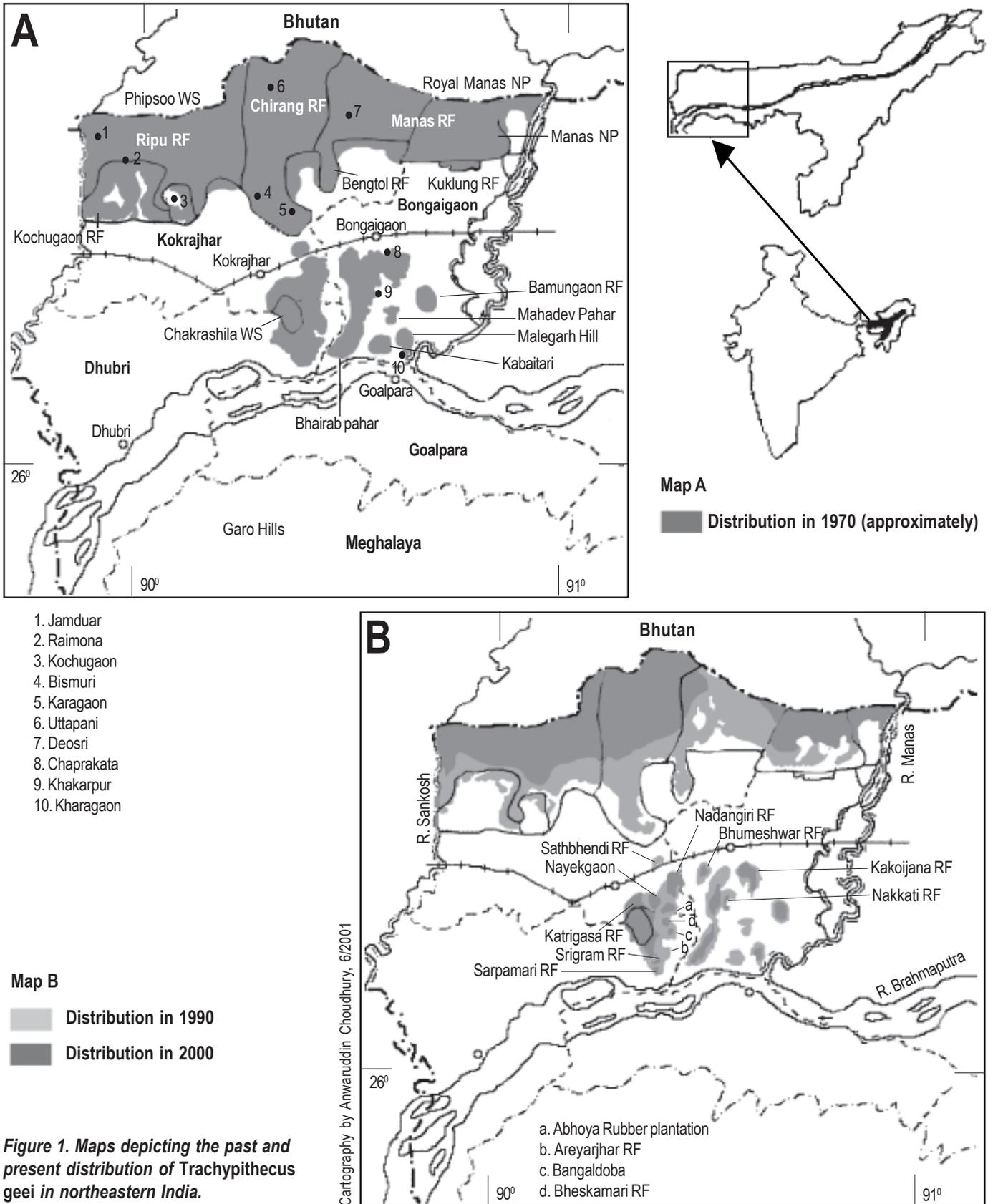


Figure 1. Maps depicting the past and present distribution of *Trachypithecus geei* in northeastern India.

near Garo villages but on enquiry I came to know that these were brought from north bank areas such as Bhairab Pahar, Nakkati, etc. by their relatives. A few Garo villages are also located near these Golden Langur habitats. Massive deforestation since late 1980s had resulted in frequent capture of young langurs, which were sold to truck drivers plying through two important national highways connecting northeastern India with the rest of the country. Such pet langurs occasionally land even in Guwahati City being sold for a few Rupees.

Table 1 lists the fragmented habitats. It appears that at least 19 isolated areas hold Golden Langur, which was originally a single habitat. Except for Manas, Ripu and to some extent Chirang, the remaining populations have no link with the larger and more secure Bhutanese populations.

Threats

The Golden Langur is in real danger all over its range in India. Never before had it faced such dangers — from rapid loss of habitat, occasional poaching and unreported accidental deaths. Chirang Reserved Forest of 593sq.km has lost more than 200sq km during the last decade, in fact at least 100sq.km in 1997-2000 alone! Areas such as Bismuri and Karigaon, which were well inside Chirang Reserve Forest has no forest cover at all now not to speak of any surviving Golden Langur. Bengtol Reserve Forest covering 60km² has hardly 5km² left that too scattered here and there. All other habitats including Chakrashila Sanctuary are also facing threats from illegal felling. What is unfortunate was that large areas were clear-felled but not wholly occupied by the encroachers (e.g., on both sides of the highway between Karigaon and Bismuri). Table 1 also shows that the Golden Langur has become locally extinct in at least seven sites during the last few decades and the sole reason was felling of trees.

Although the local tribes, mostly Bodos usually do not kill Golden Langurs but some new generation youths have taken a liking for its meat. It has been reported that contact with the Nagas was the reason for this new food habit. Still such killing is not very significant in larger habitats but it is in smaller and heavily degraded areas where they are within easy reach. Quite a good number of langurs, singly, in twos or in small groups have taken shelter in the village woodlands comprising of bamboo brakes and some trees, especially near Bismuri and farther north. These langurs have no future and are slowly vanishing through killing for food by some villagers or are getting killed by domestic dogs while crossing clearings.

Golden Langurs were never reported to raid crops. However, 'stranded' langurs near Bismuri have developed this habit thus inviting more trouble from the cultivators (Bablu Dey, pers. comm.). A local NGO has directly observed killing of at least four langurs for food in 1995 (Source: Green Heart NGO).

Although it is protected under Schedule I of the Indian Wild Life (Protection) Act, enforcement in the field outside the Protected Areas is virtually nonexistent. Food shortage is apparent in areas such as Abhoya Rubber Plantation where the langurs have started feeding on rubber seeds as fewer natural food trees are left.

Discussion and Recommendations

There are about 950km² of suitable habitat, down from about 1500km² in early 1970s, available for the Golden Langur in Assam as well as India with an estimated population of less than 2000 spread across at least 19 isolated populations (Table 1). Of these fragmented populations, except for first four (Table 1), remaining have little possibility of long-term survival. Only Bhairab Pahar-Nakkakti could provide the habitat if given adequate protection. Some areas such as Kakoijana, Nadangiri and Malegarh Hill need large-scale tree plantation if the langurs are to survive. These fragmented pockets are often recorded as discovery of new populations (Mukherjee & Southwick, 1996-97; Anon, 1996-99). Locations such as Bismuri, Karigaon, Deosri and Ultapani are inside the notified reserved forest area of Chirang. Similarly, Nayekgaon is at the northeastern foot of Chakrashila Hills although not included in the Sanctuary. The area shown as 'Salkocha' in Choudhury (1992a) included sl. 4, 11, 12, 13, 15 and 16 of Table 1, 'Bhairab Pahar' included sl. 5, 6 and 8 (there was a gap between 6 and 8), and 'Kabaitari Tilla', sl. 10 and 19 (although there was a gap).

Distribution of the Golden Langur had often created confusion (Choudhury 1992a). For example, in a smaller protected area of 500km² such as Manas National Park, it is strictly allopatric with the Capped Langur *Presbytis (=Trachypithecus) pileata*, the Manas River acting as the zoogeographic barrier (Choudhury, 1988b). This might confuse many who have not actually visited the site. For example, Ghosh and Biswas (1976) mentioned of coexistence in Manas, which is not true. Similarly, Gupta (2000) had erroneously shown on the map the distribution of *geei* mostly on the eastern side of the Manas River (whereas it occurs only on the western side). Moreover, he showed the distribution of both *geei* and *pileatus* as sympatric even in Meghalaya, which is also not correct. Slight overlapping is possible only in eastern Bhutan (Choudhury, 1992b).

There is urgent need to put a halt to all encroachments and illegal felling. All post-1990 encroachments should be evicted. The remaining forest in Chirang, Ripu and parts of Manas Reserve Forests, and Bhairab Pahar-Nakkakti should be brought under the protected area network. Chakrashila Sanctuary should be extended to include the adjacent forest pockets such as Katrigacha, Nayekgaon, etc. Isolated langurs, e.g., in Sarpamari and Srigrum Reserve Forests, which have no future, should be relocated in larger areas such as Chakrashila, Manas or Chirang. Since this is the only Golden Langur area in India, these steps

Table 1. Fragmented habitats of Golden Langur in India.

Sl.	Area name	Approximate area (km ²) of the langurs	Rough pop. est.	Habitat contiguity	Remarks
1.	i. Chirang RF, Kokrajhar dist.	350 (noted RF area, 592.5)	>500	Narrow link with Bhutan	Separated from Ripu RF by Saralbhangra RF and most of Bhutan forests by Sarpang-Gelephu road and settlements alongside. Lost about 30% of habitat in 1990s.
	ii. Manas RF (part), Kokrajhar Dist.	40	>100		Separated from other part of Manas RF by felling and encroachment in 1990s
2.	i. Ripu RF	350 (notified RF area, 605.3)	>400	Phipsoo WS of Bhutan	Separated from Chirang RF by Saralbhangra R.
	ii. Kochugaon RF, Kokrajhar Dist.	<15 (notified RF area, 214.5)	<50		Large Forest Villages, encroachment and heavy felling. Already heavily degraded even in 1970s. Hardly 10% of original habitat remains.
3.	i. Manas RF (part), Kokrajhar and Bongaigaon Dist.	60	>100	Royal Manas NP of Bhutan	Separated from Chirang RF and other part of Manas RF by felling and encroachment in 1990s.
	ii. Manas NP (part), Bongaigaon Dist	40	>150	Royal Manas NP of Bhutan	Langur is found only west of the Manas R.
4.	Chakrashila WS, Dhubri and Kokrajhar Dist	40 (notified WS area, 45.6)	>300	-	Links with adjacent forests lost in 1990s. Felling in the fringe areas.
5.	Bhairab Pahar PRF, Bongaigaon Dist	<10 (notified RF area, 36.1)	>60	Nakkati RF	Links with other adjacent forests lost in 1970s. The NH 31 separates it from Nakkati RF. Heavily degraded.
6.	Nakkati RF, Bongaigaon Dist	<10 (notified RF area, 28.8)	>60	Bhairab Pahar PRF	Links with other adjacent forests lost in 1970s. The NH 31 separates it from Bhairab Pahar. Heavily degraded.
7.	Kakojiana RF, Bongaigaon Dist	<10 (notified RF area, 17.2)	60	-	Links with other adjacent forests lost in 1970s. Heavily degraded. Population estimate by Forest Department by direct sighting.
8.	Bengtol RF, Kokrajhar Dist	< 5 (notified RF area, 60.9)	?	-	Links with Chirang RF lost in 1990s. Heavy felling in 1990s. Completely degraded.
9.	Bamungaon RF, Bongaigaon Dist	< 3 (notified RF area, 10.6)	8-10	-	Links with other adjacent forests lost in 1970s. Heavily degraded. Population estimate by SEERA (NGO).
10.	Abhoya rubber plantation, Nayekgaon, < 3 Kokrajhar and Dhubri Districts		64	Nayekgaon PRF	Links with other forests including Chakrashila lost in 1990s. Private plantation. Population count by SEERA and Green Heart (NGOs).
11.	Nayekgaon PRF, Kokrajhar Dist	< 8 (notified PRF area, 16.6)	45	Abhoya Rubber Plantation	Counted by Bablu Dey in 1998-99. Links with other adjacent forests including Chakrashila lost in 1990s. Partly degraded.
12.	Nadangiri Hills RF, Kokrajhar Dist	< 6 (notified RF area, 10.2)	>20	-	Links with other adjacent forests including Nayekgaon PRF lost in 1990s. Partly degraded.
13.	Khakarapur PRF, Bongaigaon Dist	< 5 (notified PRF area, 9.3)	>10	Nakkati RF	Partly degraded and encroached. Faint link with Nakkati RF.
14.	Malegarh Hills (Kharagaon PRF), Bongaigaon Dist	< 4 (notified PRF area, 5.9)	4-5	-	Entirely degraded. Not part of any reserved forest.
15.	Katrigocha RF, Kokrajhar Dist	<5 (notified RF area, 7.1)	>10	Chakrashila WLS	Partly degraded
16.	Srigrām RF, Dhubri Dist	<4 (notified RF area, 8.3)	>10	-	Partly degraded

Sl. Area name	Approximate area (km ²) of the langurs	Rough pop. est.	Habitat contiguity	Remarks
17. Bengalduva RF, Dhubri Dist	<4 (notified RF area, 6.9)	>10	-	Partly degraded
18. Sarpamari RF, Dhubri Dist	<1 (notified RF area, 1.7)	3-4	-	Heavily degraded. Located on the NH.
19. Bhumeswar Hill PRF, Bongaigaon Dist	<5 (notified PRF area, 14.2)	<10?	-	Heavily degraded. A few survived till 1990s; current situation not known.
20. Kabaitari tilla, Bongaigaon Dist	0 (total hilly area, 3.0)	0	-	Locally extinct in early 1990s.
21. Chandardinga Hill RF, Dhubri Dist	0 (total hilly area, < 1.0)	0	-	Locally extinct in 1970s?
22. Mahadev Hill PRF, Bongaigaon Dist	5.3	0	-	Locally extinct in early 1980s?
23. Beshkamari RF, Dhubri Dist	< 0.5 (notified RF area, 1.4)	>10	-	Links with other adjacent areas such as Chakrashila and Abhoya Rubber Plantation lost in 1990s.
24. Sathbhendi RF, Kokrajhar Dist	2.7	0	-	Locally extinct in early 1980s?
25. Arearjhar RF, Dhubri Dist	2.7	0	-	Locally extinct in early 1980s?
26. Elachijhar, Kokrajhar Dist	<2	0	-	Locally extinct in early 1980s?
27. Kuklung RF, Bongaigaon Dist	<10	0	-	Locally extinct in early 1970s?
Total	950	<2000	-	-

should be taken up on a priority basis.

Acknowledgements

Alauddin Choudhury, A.M. Mazumdar (Romu), Anil Goswami, Bablu Dey, Elgin Deb, Hakim, K.N. Deb, Mahbat Shah Ali, Mukut, Raju, Soumyadip Datta and Subhash Chanda.

References

- Anon (Unpublished).** *Indo-US Primate Project Annual Reports* (1994-1999), No. 1-5. Department of Zoology, JNV University, Jodhpur.
- Choudhury, A.U. (1988a).** Priority ratings for conservation of Indian primates. *Oryx* 22: 89-94.
- Choudhury, A.U. (1988b).** Conservation in Manas Tiger Reserve. *Tiger paper* 15(2): 23-27.
- Choudhury, A.U. (1989).** *Primates of Assam: their distribution, habitat and status*. Ph.D. Thesis. Gauhati University 300pp+maps.
- Choudhury, A.U. (1990).** Primates in Bhutan. *Oryx* 24: 125.
- Choudhury, A.U. (1992a).** Golden Langur - distribution confusion. *Oryx* 26: 172-173.
- Choudhury, A.U. (1992b).** On probable sympatric distribution of *Presbytis geei* and *P. pileata* in Bhutan. *Journal of the Ecological Society* 3: 49-51.
- Choudhury, A.U. (1997).** *Checklist of the Mammals of Assam*. Revised II Edition. Gibbon Books and ASTEC, Guwahati. 103pp, maps, illustration.
- Gee, E.P. (1964).** *The Wild Life of India*. St. James Place, London.
- Ghosh, A.K. and Biswas, B. (1976).** A note on the ecology of Golden Langurs: *Presbytis geei* Khajuria. *Journal of the Bombay Natural History Society* 72: 524-527.

Gupta, A.K. (2000). *Primates of Tripura*. Forest Department, Government of Tripura, Agartala. 40pp.

Mukherjee, R.P. and Southwick, C.H. (1996-97). Present status of the Golden Langur in Assam, India. *Asian Primates* 6(3&4):1-4.