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New Distribution Records for *Hoolock leuconedys* in India

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Abstract: The western hoolock gibbon (*Hoolock hoolock*) occurs in India (south of the southern bank of the River Dibang-Brahmaputra in the seven northeastern states), Bangladesh and Myanmar. The eastern hoolock gibbon (*Hoolock leuconedys*) is restricted to the state of Arunachal Pradesh in northeast India, and occurs also in Myanmar and China. Here we report new information that extends the known range of the eastern hoolock gibbon in India. *Hoolock leuconedys* was found in Korau circle in the lower Dibang Valley district beyond its previously known range in the Lohit district.

Key words: Hoolock gibbon, *Hoolock hoolock*, *Hoolock leuconedys*, distribution, Dibang, Lohit, Arunachal Pradesh, India

Gibbons are found in South and Southeast Asia. There are 16 species belonging to four genera. The genus *Hoolock* is characterized by a diploid chromosome number of 38 and has two species: the western hoolock gibbon (*Hoolock hoolock*) and the eastern hoolock gibbon (*Hoolock leuconedys*). In the past, *leuconedys* was considered to be a subspecies of *Hoolock hoolock* (see Groves 1967). The generic name *Hoolock* was assigned to the species only recently by Mootnick and Groves in 2005: the two gibbons were previously placed in the genus *Hylobates* and, later, *Bunopithecus*. The two gibbons are considered to be distinct species due to features in their fur coloration as described by Groves (1967, 1972).

The western (*H. hoolock*) and eastern hoolock gibbons (*H. leuconedys*) are found in India. The former also occurs

in the neighboring countries of Bangladesh (Anderson 1878), Myanmar (Tickell 1864) and China (Anderson 1878). Until 2006, however, it was believed that the eastern hoolock gibbon occurred only to the east of the River Chindwin to the River Salween in Myanmar and southwestern Yunnan Province in China (Groves 1971). Das *et al.* (2006) provided the first report of its occurrence in India, between the River Lohit in the north and the high mountains of the Dafa Bum in the south. Here we provide further information on the range of *H. leuconedys* in India.

The species was sighted during a field study (2006–2007) in the area between the rivers Dibang and Lohit in the lower Dibang valley district of Arunachal Pradesh, specifically in the area known as the Korou circle (see Table 1; Fig. 1).

Table 1. Records (sightings) of eastern hoolock gibbons, *Hoolock leuconedys*, in Korou circle area, Arunachal Pradesh, India.

	Group size	Group composition					Coordinates		Altitude (m)
		AM	AF	SA	J	I			
1	2	1	1				28°06'04.8N	95°54'29.2E	500
2	1	1					28°06'25.4N	95°55'04.9E	750
3	4	1	1	-	1	1	28°03'40.1N	95°56'00.0E	310
4	3	1	1				28°03'93.3N	95°56'49.3E	357
5	1	1					28°03'93.7N	95°56'50.6E	348
6	1	1					28°04'39.7N	95°58'19.0E	430
7	3	1	1		1		Dello Village		
8	3	1	1		1		Dello Village		
9	3	1	1			1	Dello Village		
10	3	1	1		1		Dello Village		

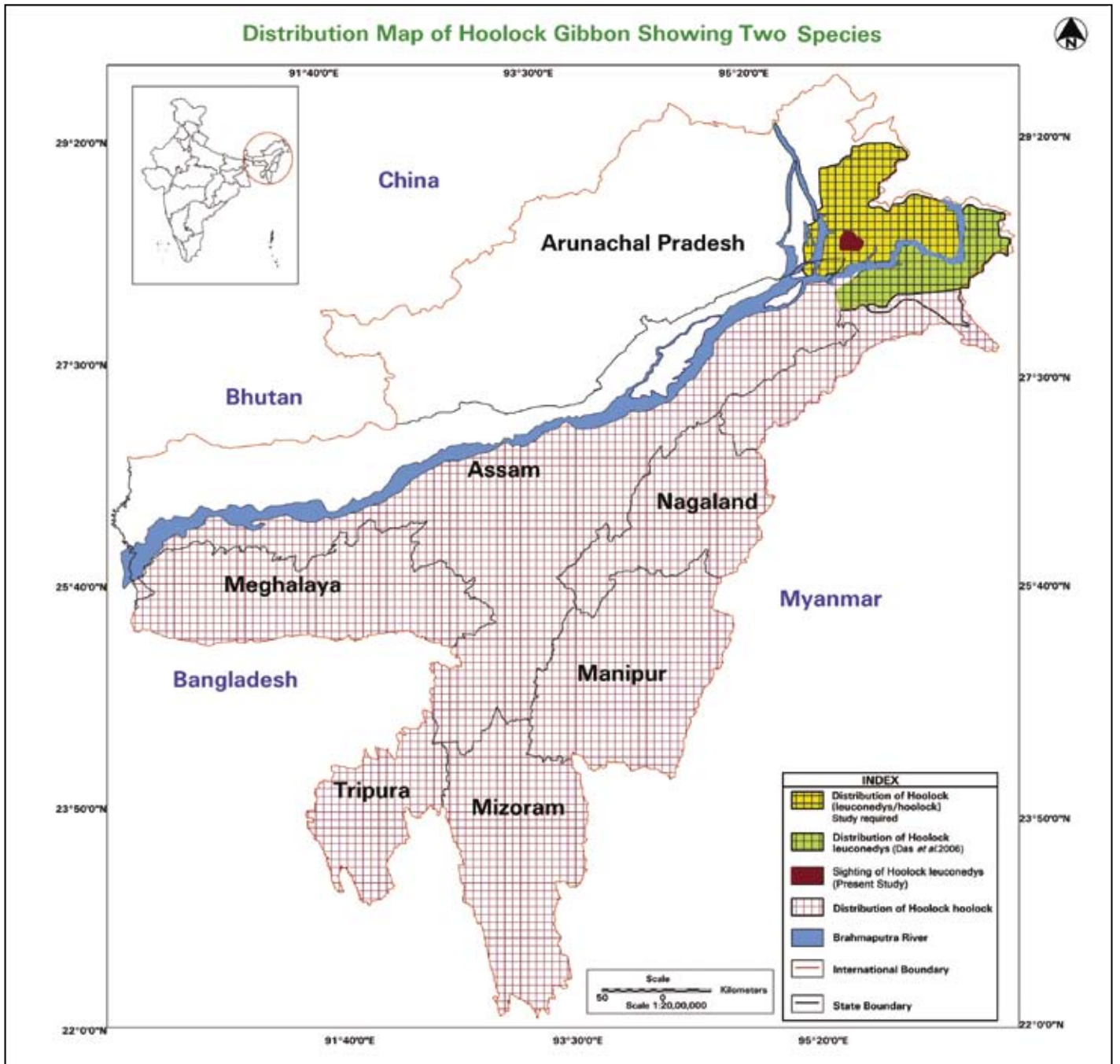


Figure 1. The distributions of the western hoolock gibbon (*Hoolock hoolock*) and the eastern hoolock gibbon (*H. leuconedys*) in northeastern India. The patch in red marks the occurrence of *H. leuconedys* reported here; between the rivers Dibrang and Lohit.

The pelage color differences that distinguish it from the western hoolock gibbon were confirmed through binoculars and photographs. Their identity was further confirmed through a review of recent literature (Groves 1972, 2001, 2007; Mootnick and Groves 2005) and through personal correspondence with Colin P. Groves and Warren Brockelman. We sent them color photographs, and both confirmed the species as eastern hoolock gibbon (*H. leuconedys*).

This range extension lies between the rivers Dibang and Lohit. Although further, more detailed, studies are needed, it is evident that forest loss and fragmentation due to expansion of tea gardens, ginger and mustard cultivation, horticulture, *jhum* cultivation, and rice paddies is a major threat to the species in this area. In 2007, a team of forest officers of the Arunachal Pradesh government, under the supervision of Mr. C. Loma of the Deputy Conservator of Forests (DCA) (Director, Biological Park, Itanagar), rescued 12 individuals of eastern hoolock gibbon (in four groups) from the Dello village in the Koronu Circle area in the Lower Dibang valley district. The gibbons had been trapped in a very small remnant forest with very few trees left standing. The rescued gibbons are now in the Zoological Park at Itanagar, the capital of Arunachal Pradesh. The Koronu Circle area on the fringe of the Mehao Wildlife Sanctuary and Turung Reserve Forest



Figure 2. Adult male eastern hoolock gibbon (*Hoolock leuconedys*) showing the genital tuft.



Figure 3. Adult female eastern hoolock gibbon (*Hoolock leuconedys*).

in Lohit district are the best sites for observing this species (Chetry *et al.* 2007). A detailed systematic study is needed to evaluate the population status of the eastern hoolock gibbons between the Dibang River and the Lohit River in particular and India in general.

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