New Distribution Records for Hoolock leuconedys in India

Dilip Chetry¹,², Rekha Chetry¹,³, Abhijit Das¹,², Chukhu Loma⁴ and Jikom Panor⁴

¹Gibbon Conservation Centre, Gibbon Wildlife Sanctuary, Mariani, Assam, India
²Aaranyak, Guwahati, Assam, India
³Department of Zoology, J. N. College, Boko, Kamrup, Assam, India
⁴Biological Park, Itanagar, Arunachal Pradesh, India

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 Koraonu 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 Koraonu circle (see Table 1; Fig. 1).

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

<table>
<thead>
<tr>
<th>Group size</th>
<th>Group composition</th>
<th>Coordinates</th>
<th>Altitude (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 AM 1 AF 1 SA</td>
<td>28°06′04.8N 95°54′29.2E</td>
<td>500</td>
</tr>
<tr>
<td>2</td>
<td>1 1 AM 1 AF</td>
<td>28°06′25.4N 95°55′04.9E</td>
<td>750</td>
</tr>
<tr>
<td>3</td>
<td>4 1 1 AM 1 AF 1 SA</td>
<td>28°03′40.1N 95°56′00.0E</td>
<td>310</td>
</tr>
<tr>
<td>4</td>
<td>3 1 1 AM 1 AF 1 SA</td>
<td>28°03′93.3N 95°56′49.3E</td>
<td>357</td>
</tr>
<tr>
<td>5</td>
<td>1 1 AM 1 AF</td>
<td>28°03′93.7N 95°56′50.6E</td>
<td>348</td>
</tr>
<tr>
<td>6</td>
<td>1 AM</td>
<td>28°04′39.7N 95°58′19.0E</td>
<td>430</td>
</tr>
<tr>
<td>7</td>
<td>3 1 1 AM 1 AF</td>
<td>Dello Village</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3 1 1 AM 1 AF</td>
<td>Dello Village</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>3 1 1 AM 1 AF</td>
<td>Dello Village</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3 1 1 AM 1 AF</td>
<td>Dello Village</td>
<td></td>
</tr>
</tbody>
</table>
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 Dibang 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
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.

Acknowledgments

We are grateful to the Forest Department of Arunachal Pradesh. Our sincere thanks go to Prof. Colin Groves and Dr. Warren. Y. Brockelman for helping us in confirming the identity of the gibbons. Special thanks to Mr. Nani Sha then Divisional Forest Officer, Mehao Wildlife Sanctuary, and Mr. G. R. Thapa, Julu Bra, Sito Mimi, Thusi Pulu, Kabu Plago, Pankaj Choudhury, Ram Munda, Pradip Barman, Pulin Hazarika, Padam Bahadur Subba and Sanjay Das for their logistic support during the study.

Literature Cited

Anderson, J. 1878. Anatomical and Zoological Researches Comprising an Account of the Zoological Results of the Two Expeditions to Western Yunnan in 1868 and 1875. Quaritch, London.


Authors’ addresses:

Dilip Chetry, Abhijit Das, Gibbon Conservation Centre, Gibbon wildlife Sanctuary, Mariani-785634, Assam, India, and Aaranyak, 50, Samanway Path (Survey), Guwahati-781028 Assam, India. E-mail of first author: <dilip@aaranyak.org>.

Rekha Chetry, Gibbon Conservation Centre, Gibbon Wildlife Sanctuary, Mariani-785634, Assam, India, and Department of Zoology, J. N. College, Boko, Kamrup, Pin:781123, Assam, India.

Chukhu Loma and Jikom Panor, Biological Park, Itanagar, Arunachal Pradesh, India.

Received for publication: May 2008

Revised: October 2008