

Project Update: October 2017

Hoolock gibbon is an arboreal, monogamous and territorial apes inhabiting the rainforest of Southeast Asia. In Bangladesh, they are distributed in the northeastern and southeastern region mainly in Sylhet, Chittagong, Chittagong hill tracts and Cox's Bazar forest divisions. Among 12 species of gibbons, Western hoolock gibbon (*Hoolock hoolock*) (Local name: Ulluk) is the only species recognized in Bangladesh, and undeniably they are critically endangered. The forest complexes in this area that are home to the hoolock gibbon continue to face pressure from severe habitat destruction, human encroachment and fragmentation driving the species on the verge of extinction. The population of gibbon has greatly reduced around 90% during the last two decades. Safeguarding a future for the hoolock gibbon is the most important priorities in primate conservation. Here I consider how hoolock gibbons in Bangladesh are influenced by inter-specific competition with other frugivorous vertebrates which will fill a gap in gibbon studies and avail in the promotion of conservation strategies.

This study aims:

- i. To unravel the diet and feeding behavior of hoolock gibbon.
- ii. To study the relationship of hoolock gibbons diet in relation to plant phenology in different seasons.
- iii. To determine the major competitors of gibbon and therefore to enumerate the niche overlap between hoolock gibbon and other frugivorous vertebrates.
- iv. To raise public awareness through conservation education programme.

Scan sampling method on all visible members of the group at every 5-minute interval will be used to congregate the behavioral data of gibbon. In addition to scan sampling, *ad libitum* sampling will also be employed to collect data on inter-specific competition between gibbon and other frugivorous vertebrates. Vegetation survey



will be conducted using 50 × 50 m quadrat method and at the same time phonological data will be cumulated to record the abundance of plant food resources and temporal variation in fruit availability for hoolock gibbon. Local people attitudes and perceptions towards the conservation of hoolock gibbon will be directed based on a semi-structured questionnaire. The open-ended questions will be asked for an assessment of the respondent thoughts concerning the conservation of hoolock gibbon in the area. We are optimistic that this project will be an inception for the enthusiastic researcher and policy makers to initiate their interest on the conservation movement of this vanishing ape.

Our team observing the behavioural activity of hoolock gibbon at Lawachara forest



An adult female hoolock gibbon with its infant