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SUMMARY

This study on food selection and ranging in the hoolock gibbon (*Hylobates hoolock* Harlan 1834) was carried out between December 1996 and April 1997 in Borajan Reserve Forest, a disturbed and fragmented patch of remnant tropical evergreen forest in Upper Assam, India.

The hoolock gibbon is a primarily frugivorous species, confined to closed-canopy evergreen forests of North-east India, Bangladesh and Burma. This ape is highly endangered in its entire range. Threats to the continued existence of the hoolock are from large-scale destruction of its habitat and hunting.

Two troops of gibbons were followed intensively for four months and behavioural data were collected by continuous focal animal observations. Data were also collected ad libitum on a third troop. Data on the structural components of the vegetation and on the availability of food resources in the intensive study area were collected systematically.

The results of the study show that food availability influenced the diet, movement patterns, home-range sizes and behaviour of hoolock gibbons. Gibbons were selective in their diet using only forty-three plant species out of the more than two-hundred species present. Figs constituted important keystone resources for the gibbons. In months of low fruit availability, the gibbons had a predominantly folivorous diet. Home ranges were small (10.4 ha and 5.4 ha) and habitat degradation represents the greatest threat to the gibbons in Borajan R.F.