ALTITUDINAL MOVEMENT PATTERNS OF GUIZHOU SNUB-NOSED MONKEYS (*RHINOPITHECUS BRELICHI*) IN FANJINGSHAN NATIONAL NATURE RESERVE, CHINA

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Movement by an individual or groups forms an essential component of both daily and annual activity schedules of most animal species. In primates, variations in movement patterns are largely affected by food abundance and distribution. Depending upon the dimensionality of the environment, movement patterns can include a substantial altitudinal component. We investigated altitudinal movements of Guizhou snub-nosed monkeys (*Rhinopithecus brelichi*) at Fanjingshan National Nature Reserve in China. The monkeys ranged in mixed evergreen and deciduous broadleaf forest at elevations between 1,350 and 1,870 m asl; the overall mean elevation was 1,660±73 m asl (*n* = 79). There was no significant difference in the mean elevations among seasons. Based on full days of observation, the mean daily path length was 935±349 m (range: 523-1672 m, *n* = 16). The monkeys exhibited a distinct pattern in altitudinal movement that coincided with their daily activities; they typically traveled to higher elevations to feed in the morning (98% of observation records) and descended to lower elevations before retiring at night (96%). Accordingly, the monkeys chose significantly lower elevations for their night roosts than for their day roosts. Our study suggests that movements of *R. brelichi* may be strongly influenced by the availability of food resources and sleeping sites in their habitat. Furthermore, preservation of evergreen and mixed evergreen and deciduous forests as a contiguous intact habitat zone should be a conservation priority for the nature reserve.

Keywords: colobines, snub-nosed monkeys, altitudinal movement, habitat conservation