

**MULTI-LEVEL SOCIAL SYSTEM OF THE SICHUAN SNUB-NOSED MONKEYS**

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This presentation provides the first precise information on the social organization of free-ranging Sichuan snub-nosed monkeys (*Rhinopithecus roxellana*) based on individual identification and confirms that this species forms a multi-level society in its natural habitat. The study group is located in the Qinling Mountains, Central China, and was composed of 59 to 113 monkeys during the study periods. Most monkeys except for solitary males belonged to one of 6 to 8 one-male multi-female units (OMUs) that always travel together in one large band. The average size of OMUs was  $9.0 \pm 2.3$ ;  $8 \pm 1.5$  in winter and  $11.1 \pm 2.0$  in spring. Band size was relatively stable in each study period and changes occurred in the interval between study periods. Band size fluctuations always accompanied with the change of numbers of OMUs and young monkeys in the band. Adult females took a key role in maintaining long-term relations with other members in the OMU. Female social interactions appeared to resemble those of other female-bonded primate societies. Linear dominance order among OMUs was detected from displacements between them. It is presumed that the inter-unit dominance relationship might have evolved as a result of competition for preferred food trees. This species share similarities and dissimilarities with gelada (*Theropithecus gelada*) and Hamadryas baboons (*Papio hamadryas*) in their multi-level social organization. The evolutionary scenario of social system in these species might be an analogous process influenced by similar ecological pressures i.e. marginal habitats with harsh environmental conditions.

Keywords: Multi-level society, One-male unit, *Rhinopithecus roxellana*, Colobine