

Behavioral monogamy and fruit availability in the large treeshrew (*Tupaia tana*) in Sabah, Malaysia

Abstract

Behavioral monogamy in mammals varies from male-female pairs that spend most of their time in close spatial contact (associated pair-living) to pairs that occupy exclusive territories but travel, forage, and sleep alone (dispersed pair-living). We present radiotelemetry data on 46 adult large treeshrews (*Tupaia tana*) from 2 populations in Sabah, Malaysia, that indicate that this species forms dispersed pairs across a range of ecological conditions. Dispersed pair-living was the primary behavioral mating system in primary forest during a major fruit masting event, in nonmasting primary forest, and in selectively logged forest with significantly higher fruitfall than in primary forest. Territories of behavioral partners were spatially concordant, but both male and female territories typically overlapped the boundaries of 1-3 extra-pair territories. Comparison between masting and nonmasting forests indicated that females exhibited better body condition during masting, whereas males exhibited larger home-range areas and longer daily movements. Both males and females exhibited better body condition in selectively logged versus primary forests, but ranging patterns were not significantly different between these habitats. We argue that intraspecific foraging competition is the most likely explanation for the evolution of dispersed pair-living in *T. tana*. © 2007 American Society of Mammalogists.