

SLEEPING SITE ECOLOGY IN A PAIR-LIVING LEMUR: THE EFFECT OF SEASON

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Seasonal changes may have a strong effect on vegetation and thus on the safety of sleeping sites in arboreal primates. Finding a suitable place to sleep may depend on predation risk and fluctuations in temperature which affect the energy expenditure for thermoregulation. In this study, we investigated how seasonality influenced sleeping site characteristics and usage in the woolly lemur (*Avahi occidentalis*), a pair-living nocturnal lemur. It lives in the dry deciduous forest of northwestern Madagascar, a highly seasonal and predictable environment. Six males and six females were fitted with a radiotransmitter on a backpack. We collected daily data on the quality (e.g. height), number and distribution of sleeping sites, the pattern of use and reuse, and sleeping group composition in the dry and rainy season between May and December 2008. Our results revealed that 2 to 5 lemurs slept together either on a single branch or in closed vegetation in trees. During the dry season, lemurs mostly slept at a height of 5-10 m, using preferentially the middle part of a tree in the canopy. There was no height preference during the rainy season. Lemurs used significantly more sleeping sites during the rainy season than during the dry season and stayed significantly longer at the same sleeping tree. Our data indicate that sleeping site ecology in woolly lemurs is strongly affected by season and its relation to predation risk, thermoregulation, and the potential availability of safe sleeping sites

Keywords: socioecology, sleeping site, seasonality, woolly lemurs