

**RANGING BEHAVIOR AND SOCIAL DECISION-MAKING OF TWO SPECIES OF LEMURS AT BERENTY RESERVE, MADAGASCAR**

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Using the consensus decision-making model as outlined by Conradt and Roper (2005), the ranging and social behavior of two troops of free-ranging ringtail lemurs (*Lemur catta*) and sifakas (*Propithecus verreauxi verreauxi*) in Berenty Reserve, Madagascar, were observed for 12hours/day for 30 days. Data were recorded using one-zero time sampling in 5-minute intervals on each troop's GPS position, direction, angle and distance of travel; behaviors before, during and after travel including social interactions and vocalizations; and choices and locations of foraging, resting and sleeping sites. In both species, the dominant female vocalized significantly more frequently and with increased intensity prior to departing a given location. She was the first individual to leave a given location for the majority of travel bouts and set the direction for travel with the remainder of the troop following her path. The dominant female was also the individual who initially reached, or appeared to choose, the destination site significantly more often than other troop members. The same foraging, resting and sleeping sites were repeatedly visited by each troop. From all travel bouts recorded for each species, a significant percentage of the routes to achieve these known locations were unique. The data from both species support the "unshared consensus" model for these two lemur species' decision-making in ranging behavior.

Keywords: group ranging behavior, consensus decision-making, ringtail lemurs, sifakas