

**COORDINATION PROCESSES AND DECISION-MAKING IN GROUPS OF WILD RED-FRONTED LEMURS (*EULEMUR FULVUS RUFUS*)**

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Group-living species have to maintain cohesion in spite of inter-individual conflicts of interest. Therefore, activities of group members should be coordinated and collective decisions have to be made. Spatial movements represent an excellent model to study the fundamental behavioral mechanisms involved in group coordination. We analyzed the processes and decision-type underlying group movements of red-fronted lemurs (*Eulemur fulvus rufus*, Lemuridae) in Kirindy Forest, Western Madagascar. Because this species lacks sex-specific dominance patterns, studies of red-fronted lemurs can contribute important comparative information on leadership and decision-making in non-anonymous groups. We observed natural movements of four groups of lemurs throughout an entire year, using an operational group movement definition, and collected data on initiation, leadership, followership and termination. Additionally, we implemented a foraging experiment with four feeding stations placed about 75m apart from each other. Using a motion detector camera system we studied group cohesion, decision-making and conflict management in situations with varying levels of conflict provoked by different provisioning of the feeding stations. We found that both sexes lead groups but females did so more often than males. Ecological season had no impact on leadership. In contrast, reproductive state influenced leadership, with males leading more often during birth season. Results of the feeding experiments will be compared with decision-making processes during natural movements to draw general conclusions on coordination and decision-making in these small groups of relatively egalitarian and tolerant primates.

**Keywords:** group coordination, decision-making, primates, Madagascar