

SOCIECOLOGY OF TWO SPECIES OF TUFTED CAPUCHIN MONKEYS: *CEBUS LIBIDINOSUS* AND *CEBUS NIGRITUS*

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Socio-ecology considers that primates adapt their social behaviour to ecological conditions, and predicts that the features of food resources shape the competitive regimes faced by female primates, which in turn, affect the social relationships among them. However, adaptability and variation of social behaviour may be constrained by phylogenetic inertia. The comparative study of closely related species may help to identify the relative contribution of ecological determinants and of phylogenetic inertia to primate social systems. We compared social relationships and food characteristics of two species of the genus *Cebus*, the black capuchin monkeys (*C. nigrinus*) of Carlos Botelho State Park, an area of Atlantic Forest in São Paulo state, and the bearded capuchin monkeys (*C. libidinosus*) of Fazenda Boa Vista, a semi-arid habitat in Piauí state, Brazil. Bearded capuchin females fed on clumped, high quality and usurpable resources (fruits) all year round, whereas black capuchin females relied on evenly distributed, low quality food sources (leaves) during periods of fruit shortage. As predicted by socio-ecological models, bearded capuchin females were phylopatric and established linear and stable dominance hierarchies, coalitions and grooming relationships. Black capuchin females competed less often, and could transfer between groups, what might explain the lack of coalitions and grooming bonds among them. The species differed from each other in accordance with differences in the characteristics of their main food sources, as predicted by socio-ecological models, suggesting that phylogenetic inertia do not constrain social relationships established among female capuchin monkeys. Funding: FAPESP.

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