DOMINANCE STYLE AMONG FEMALE WHITE-FACED CAPUCHINS (CEBUS CAPUCINUS) AT SANTA ROSA NATIONAL PARK, COSTA RICA

M.L. Bergstrom, L.M. Fedigan

University of Calgary, Calgary, Alberta, Canada

Presenter's Email: mbergstr@ucalgary.ca

Dominance style is created by a suite of traits (e.g., bidirectionality of aggression, kin bias and post-conflict conciliation) that have been found to covary among macaques. Dominance styles vary along a continuum from ‘despotic’ (strict) to ‘relaxed’ (tolerant) in response to social and ecological pressures. The white-faced capuchin is a female philopatric and male dispersed species that exhibits nepotistic, linear, strong and stable dominance hierarchies similar to many resident-nepotistic Old World monkeys. We studied the social behavior of female capuchins to determine if traits covary to create a dominance style akin to Old World monkeys. We observed 22 adult females in three habituated groups from January – May 2008 at Santa Rosa National Park, Costa Rica and constructed dominance hierarchies based on the direction of dyadic submission. Females exhibited low bidirectionality of aggression across three measures: 1) directional inconsistency index (6.9 – 18.8%); 2) Dyads-Up index (0 – 3.2%); and 3) percentage of counteraggression (0 – 3.6%). We assessed the degree of kin bias to determine if tolerance was exhibited more towards close maternal kin ($r \geq 0.25$) than distant/non-kin and found significant kin bias in approach and grooming behaviors but not proximity or co-feeding. These results suggest that relative to macaques, white-faced capuchins exhibit an intermediate (not entirely despotic or tolerant) dominance style. Further studies within the genus Cebus, or sister taxa Saimiri, will help to expand our knowledge of dominance style and assess behavioral variation among platyrrhines.

Keywords: competitive strategies, kin bias, netropical primates, social behavior