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**THE INFLUENCE OF SEASONAL SCARCITY ON POWER DYNAMICS IN VERREAUX'S SIFAKA
(*PROPIITHECUS VERREAUXI*)**

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Seasonal scarcity of food resources results in severe losses of body mass in Verreaux's sifaka. Prior population-level analyses suggested that when food is plentiful, sifaka exhibit reversed sexual dimorphism, but when food is scarce, they exhibit monomorphism. This fluctuation in dimorphism was hypothesized to result in variation in intersexual power. If female power is based upon females having superior fighting ability, then female-to-male aggression and male-to-female submission are expected to decrease during the season of scarcity and monomorphism. Body mass and behavior data were collected on 13 adult sifaka (*Propithecus verreauxi*) living in 5 groups in the Kirindy Forest for 17 months. Data were analyzed within dyads. Contrary to expectations, the ratio of male to female body mass did not fluctuate significantly across the year when the data were examined within dyads. Moreover, not every female was larger than the male(s) in her social group. Nevertheless, all females exhibited significantly higher rates of aggression and all males exhibited significantly higher rates of submission in intersexual dyads, but rates of aggression and submission did not significantly fluctuate with seasonal food availability. These findings suggest that female power over males in Verreaux's sifaka does not vary with the availability of food resources and is not based on superior fighting ability. Alternative explanations are explored.

Keywords: lemur, female dominance, seasonality, sexual dimorphism