

****Evaluating the Effects of Electric Cables on Urban Howler Monkeys with Local Knowledge and Naturalistic Observation**

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Black-and-gold howler monkeys commonly inhabit urbanized areas of South America often using anthropogenic structures, such as electric cables, to travel across urban environments, which can result in increased rates of mortality. The urban howler monkey troops in Pilar, Paraguay, offer a unique opportunity to understand the dynamic between humans, wildlife, and complex urban habitats. With very little research existing on the howler monkey populations in Paraguay, this study aims to provide initial understanding of the relationship between urban howler monkeys and human populations through an interdisciplinary research approach. During summer 2021, we studied the two most-at-risk monkey troops in Pilar to evaluate whether proximity to electric cables is influencing monkey behavior. We grouped proximity to electric cables into 3 groups, 15 ft, and we grouped behavior into 7 classes: resting, feeding, traveling, playing, mating, grooming, and other. We found evidence that the behavior of the monkey troops had a significant behavior difference across 3 levels of proximity to electric cables ($F = 225.8$, $df = 12$, $P < 0.001$). Next, we will fit a multinomial model to further assess the effect of electric cable proximity on behavior. We also explored the human dimension aspect of the monkey-cable issue by interviewing 104 community members, where views ranged from being concerned for the monkeys to viewing populations as pests. In the future, the results of this study will provide valuable sociological and ecological tools to further assess the nuances and complexities of social-ecological issues in Paraguay.