

FEATURE ARTICLES

DISPLAY BEHAVIOR AND SPATIAL DISTRIBUTION OF THE WHITE-CROWNED MANAKIN IN THE ATLANTIC FOREST OF BRAZIL

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Abstract. We studied the display behavior and spatial distribution of the White-crowned Manakin (*Dixiphia pipra*, formerly in the genus *Pipra*) in the Atlantic Forest of the state of Rio de Janeiro, Brazil. The study area included three leks, two apparently solitary display sites, and two “collective display sites,” where definitive-plumaged males, predefinitive-plumaged males, and birds of undetermined sex displayed. The average distance between display sites was 68.0 ± 24.4 m ($n = 8$, range = 41–113 m). Males occupied the same display sites among years. The dispersion pattern of males was typical of exploded or dispersed leks. Males did not display in auditory or visual contact, except at the two display sites that were closest to each other. Lekking White-crowned Manakins used 11 display behaviors and two vocalizations. Four of the 11 display behaviors were recorded only at the collective display sites. We only observed males displaying in the presence of other individuals, regardless of whether it was a collective or solitary display site. Definitive- and predefinitive-plumaged males and birds of indeterminate sex all displayed together. The White-crowned Manakin repertoire of 11 display behaviors indicates a more complex display behavior than previously described.

Key words: Atlantic Forest, display, lek, manakins, song, spatial distribution.