A Comparison of Lion Home Range Sizes in Two Management Blocks in a Semi-Arid Savannah National Park of Zimbabwe

Mary M Ngwenya Naison M Mkandhla John V Muzvondiwa

Abstract

A comparison of home range sizes of 4 collared lions, Panthera leo was carried out in two management blocks of Hwange National Park during the wet season. Home range sizes and utilization distribution were determined. Female lions' home ranges significantly differed in the Main Camp and Ngamo Blocks (t-calculated= 3.37; 2d.f; t-critical= 2.92). Intersex variations in home ranges were observed in the Main Camp block (t-calculated= 7.82; 2d.f; t-critical= 2.92). Lions spent most of the time inside the park but some moved outside the park. Solitary lions encroached in human settlements more than prides and there were interactions between the solitary male and female lions from Main Camp block. Main Camp lions had larger range sizes than Ngamo lions and males exhibited larger ranges than females. The encroachment of lions into communal areas has important implications for park management and human-wildlife conflict.