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# Determining the Functionality of Urban Wildlife with Large Megafauna: A Case Study from Chobe District, Northern Botswana

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**Abstract :** Transfrontier wildlife corridors can be successful conservation tools, connecting protected areas and reducing the impact of habitat fragmentation on mobile species. Urban wildlife corridors have been proposed as a potential mitigation tool to facilitate the passage of elephants through towns without causing conflict with urban communities. However, because such corridors are typically narrow and close to human development, wildlife (particularly large mammals) may be less likely to use them. We used remote-sensor camera traps and global positioning system collars to identify the movement patterns of African elephants Loxondonta africana through narrow, urban corridors in Botswana. The corridors were in three types of human-dominated land-use designations with varying levels of human activity: agricultural, industrial and open space recreational land. We found that elephants used the corridors within all three land-use designations and we identified, using a model selection approach, that season, time of day and rainfall were important factors in determining the presence of elephants in the corridors. Elephants moved more slowly through the narrow corridors compared with their movement patterns through broader, wide-ranging corridors. Our results indicate that urban wildlife corridors are useful for facilitating elephants to pass through urban areas.

**Keywords :** camera traps, conservation, human-elephant coexistence, land management, urban wildlife corridors
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