

HABITAT ASSOCIATIONS OF BIRDS OF PREY IN URBAN BUSINESS PARKS

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ABSTRACT

Conservation in business parks is a growing concern due to the amount of land they occupy and their pattern of development of formerly vacant land on the fringes of urban areas. To investigate the use of business park sites by raptors, I conducted call-broadcast surveys for raptors at a set of 155 survey points within the business park landscape of the St. Louis area during the breeding season of March through June, 2012. The detection data from these surveys was used to model the occupancy probability of the target species of raptor at each survey site and to determine the effect of habitat variables at each site on occupancy probabilities.

In the occupancy modeling analysis, the probability of raptor occupation was negatively associated with lawn cover. Occupancy probabilities of red-tailed hawks and Cooper's hawks were positively associated with woodland cover, and American kestrel occupancy probability was positively associated with grassland cover. I would recommend that businesses concerned with the conservation of raptors in and around their properties plan to develop less lawn area, preserve or plant more native grassland, and preserve woodlots.