

RESOURCE SELECTION, MOVEMENT PATTERNS, AND SURVIVAL OF POST-
FLEDGING GRASSLAND BIRDS IN MISSOURI

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ABSTRACT

Current grassland management paradigms focus on addressing nesting requirements for grassland birds, but ignore post-fledging requirements. I described resource selection, movement patterns, and survival of post-fledging dickcissels (*Spiza americana*) and eastern meadowlarks (*Sturnella magna*) in southwestern Missouri, from 2002 to 2004 using radio telemetry.

Across species at the micro-scale, there was support for the predation hypothesis (both species) and the thermal refuge hypothesis (dickcissels only). Woody cover (both species) and vegetation height (meadowlarks) had the highest relative importance. At the landscape scale, shrubby prairies, longer distances to forests, roads, and grazing were negatively associated with juvenile dickcissels. Crops, pastures, increasing distances to ponds and streams were positively associated with juvenile meadowlarks. Home range patterns were mostly non-linear and the number of siblings and the order of fledging were the best predictors of home range size. Post-fledging survival was higher for meadowlarks than dickcissels. My results indicate that our concepts of suitable breeding habitat need to be modified to accommodate post-fledging requirements and maximize the effectiveness of conservation strategies.