

# EVALUATION OF PATCH-BURN GRAZING ON SPECIES RICHNESS AND DENSITY OF GRASSLAND BIRDS

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## ABSTRACT

A patch-burn grazing (PBG) management technique was applied to four native tallgrass prairies in southwest Missouri to evaluate its effect on species richness and density of grassland birds. Treatment prairies were spring burned and grazed during the summer while control prairies were spring burned and ungrazed. Birds were identified while walking line transects in both the treatment and control units. Distances were measured to all birds using laser rangefinders, and estimated densities for each species were generated using Program Distance v5.0.

PBG prairies showed significantly greater species richness. Densities of Eastern Meadowlarks (*Sturnella magna*) and Grasshopper Sparrows (*Ammodramus savannarum*) also were greater in PBG prairies. The results of this study suggest that PBG is a viable management technique to increase richness and density of species associated with short grasslands while not significantly reducing the density of those species associated with tall grasslands.