

EFFECTS OF EVEN-AGED FOREST MANAGEMENT ON EARLY SUCCESSIONAL BIRD SPECIES IN MISSOURI OZARK FOREST.

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ABSTRACT

I examined the effect of different clearcut sizes on species richness, abundance, and reproductive success of five early successional birds: Yellow-breasted Chat, Indigo Bunting, White-eyed Vireo, Hooded Warbler, and Prairie Warbler in the Missouri Ozarks. The clearcuts ranged in size from 0.95 to 11.38 ha. A total of 41 bird species were recorded. A positive relationship between clearcut size and avian species richness was found ($r^2 = 0.6975$, $P < 0.05$). Clearcut size had a significant effect on the relative abundance of early successional species; Hooded Warbler abundance was not affected by clearcut size. Even-aged treatments of different size in a large forest matrix had a positive effect on early successional birds. Larger clearcuts sustained greater abundance of early successional birds and did not affect significantly mature forest bird species.