
REDUCED REPRODUCTIVE SUCCESS OF GRAY CATBIRDS IN WESTERN WOODLAND HABITATS DOMINATED BY EDGE (Poster)

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In the western United States, relatively few studies have comprehensively examined songbird performance in fragmented habitat, particularly within naturally fragmented systems. For this study, we compared territory density and breeding success of Gray Catbirds (*Dumetella carolinensis*) from 2014-2016 in the Bitterroot Valley of Montana, between two woodland habitat types: floodplains and naturally fragmented draws. These two habitats fell within the same human-modified landscape, abutting mixed-use grasslands. Yet, they differed in configuration or their spatial distribution. When compared to floodplain birds, results showed that draw birds had larger territories, lower daily nest survival rates, delayed nest initiation patterns and reduced fledgling success. We also collected vegetation data around nests to see if this was a potential mechanism driving the differences across habitat types. We found the percentage of down woody debris and mid-shrub canopy cover were significantly higher in draws than in floodplains. However, neither vegetation variable significantly influenced catbirds' daily nest survival rates. This excluded local vegetation as the driving mechanism behind differences and provided evidence toward configuration. Draws, as thin strips of corridor habitat, contain high amounts of edge and this configuration could lead to an increase in documented "edge effects". Our results corroborate studies in the eastern U.S. which have shown negative impacts from high edge prevalence on songbird reproduction. Overall, this study's results can assist managers in understanding that increasing the amount of edge habitat in human-altered landscapes could have negative consequences on songbird reproductive success.