

## **\*\*Bird Community Responses to Habitat Manipulations**

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Habitat treatments such as prescribed burning and mechanical thinning are commonly conducted across the United States for many reasons including reducing fuel loads, increasing habitat quality for wildlife, and modifying forest structural diversity. The Rocky Mountain Elk Foundation has implemented numerous habitat treatments in the Western US to increase habitat quality for elk and other species. Understanding how habitat treatments impact bird communities is important in conserving their habitat and preserving ecosystem services and recreational opportunities that they provide. The objectives of this study are to 1) determine how prescribed burning and mechanical thinning impact occupancy and species richness of birds and 2) determine how these impacts change over time since treatment and in different landscape contexts. To determine these impacts, we sampled the bird community at paired treated-control sites across eastern Oregon, northern Idaho, and western Montana. We sampled sites 1-30 years post treatment. We visited sites three times between May and August, 2018-2019. We conducted point counts and sampled forest and vegetation characteristics along randomly located points within all site pairs. We measured treatment effects on bird communities using changes in occupancy of our focal species (Western Bluebird (*Sialia mexicana*), Dark-eyed Junco (*Junco hyemalis*), Mountain Chickadee (*Poecile gambeli*), and Woodpeckers), and species richness. Our results indicate that there is no significant treatment effect on species richness or occupancy of our focal species.