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## AVIAN COMMUNITY CHANGES IN RELATION TO DIFFERENT FOREST FIRE CONDITIONS IN CENTRAL IDAHO

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Wildfire is an important driver of forest bird communities in western North America. To fully understand wildfire effects, more studies comparing species-specific responses across space, time, and a range of burn severities are needed. We analyzed point count data ( $n = 809$  point  $\times$  year survey occasions; 2002–2010) from central Idaho to examine forest bird community responses to fire. Using community occupancy models, we analyzed changes in point occupancy before and after prescribed burning and wildfire, and along a post-wildfire burn-severity gradient. Occupancy patterns were largely consistent with those expected from species life histories. Cavity nesters and aerial insectivores (mountain bluebird [*Sialia currucoides*;  $n = 37$  survey occasions detected], house wren [*Troglodytes aedon*;  $n = 15$ ], Olive-sided Flycatcher [*Contopus cooperi*;  $n = 15$ ]) responded positively to fire consistent with increases in nesting substrate and foraging opportunities expected for these species. Shrub-nesting species (lazuli bunting [*Passerina amoena*;  $n = 75$ ], Black-headed Grosbeak [*Pheucticus melanocephalus*;  $n = 29$ ]) exhibited lagged positive responses with the expected lag in shrub development after wildfire. In contrast, canopy-nesting foliage gleaners and pine-seed consumers (Clark's nutcracker [*Nucifraga Columbiana*;  $n = 50$ ], Townsend's warbler [*Setophaga townsendi*;  $n = 133$ ]) responded negatively to wildfire. More species responded positively than negatively to fire, and responses to high-severity wildfire were stronger than to prescribed burning. Consequently, species richness increased by approximately 3 species from low- to high-severity burned points and pre- to post-wildfire years. Our results suggest high-severity wildfires generate important habitat for many species, contributing positively to avian diversity.