
FACTORS INFLUENCING THE DISTRIBUTION OF RIPARIAN BREEDING BIRDS ALONG THE YELLOWSTONE RIVER

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Riparian zones provide some of the most diverse and productive habitats for native birds in the western U.S. However, most riparian zones have been significantly modified by human activities. It is important to identify relationships between riparian birds and characteristics of the environment to understand the potential influences of floodplain management on birds. We examined the factors affecting riparian bird species distribution within cottonwood forests along the middle and lower sections of the Yellowstone River in Montana. We investigated the influences of local habitat, forest cover, and land use on the occurrence or abundance of 14 bird species. Furthermore, we considered whether geographical location along the river affected bird species distribution. There was strong evidence that these factors were important to birds, and the relative influences of each factor depended upon life history characteristics of each species. The effect of river location on the occurrence or abundance of species suggests that broad-scale influences may be important predictors of bird distribution along rivers. The

Yellowstone River is one of the few remaining free-flowing rivers in the lower 48 states, and may serve as a reference for understanding the factors influencing the distribution of birds along a river, and provide valuable information for the management of riparian species.