

## **Passerines: Documenting the Little Ones**

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Passerines account for seventy-five bird species known to nest in Yellowstone National Park, with an additional twenty-three species that occur during summer, migration or winter. Because of concerns about severe declines in songbirds across North America, we conduct several studies that focus on these species. Point counts and line transects serve to monitor bird populations in several habitat types: riparian willows, grassland/sagebrush steppe, recently burned forests, and mature forests. Building on Baril's 2005 – 2007 graduate research, point counts in riparian willows from 2008 – 2021 have detected 49 songbird species, with yellow warblers the most abundant species. A banding program also occurs in riparian willows and follows Monitoring Avian Productivity and Survivorship (MAPS) protocol. Although only 1% of Yellowstone NP consists of willows, this habitat type attracts the most nesting songbirds. We banded >1,300 individuals during the first six seasons. We also initiated counts of birds in recently burned forests. Because wildland fires, augmented by warming and drying due to climate change, pose threats to mature mixed conifer habitats in the park, we count bird species and abundance in these forests. Counts in lodgepole pine forests found fewer than half the number of bird species when compared with more diverse forests.