

## **Montana's Integrated Monitoring in Bird Conservation Regions Program (IMBCR) - Monitoring for Management and Conservation**

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The 2019 field season marks the 10th consecutive year of statewide implementation of the Integrated Monitoring in Bird Conservation Regions program (IMBCR) in the state of Montana. Today, the IMBCR program represents the second largest breeding landbird monitoring program in the US. IMBCR is made possible via a broad partnership of government and non-government agencies from the Great Plains to the Intermountain West. The randomized, hierarchical sampling design allows for sampling on private and public lands and within all vegetation types. The sampling framework allows for inference about avian populations at multiple scales, from a National Forest or Bureau of Land Management field office, up to the regional level. Using a spatially-balanced, hierarchical study design, the IMBCR program provides density and occupancy estimates for bird species at various spatial extents across the western U.S. Managers can use these baseline estimates and habitat-specific information for project-level planning and environmental assessments. The IMBCR program also provides context for targeted monitoring in project areas to evaluate impacts of land-use change or conservation actions. We highlight several case studies where short-term monitoring efforts leverage the long-term IMBCR data to evaluate avian response to land management practices.

