

Part I - Tracking Small Wildlife Migration Collaboratively Across the West

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Wildlife movement, including migration, influences the ability for species to adapt and survive. Without a better understanding of movement and connectivity, most species-focused conservation strategies may not reflect full annual cycles. The Motus Wildlife Tracking System, or Motus, helps to fill that void by deploying miniaturized and digitally encoded VHF tags on wildlife, called Motus tags, in combination with strategic placement of automated receiving units, called Motus stations. In fall of 2018, MPG Ranch spearheaded the “Intermountain West Collaborative” (IWC) Motus Project aiming to expand the western Motus network for all researchers to use. In 2019, the IWC Motus Project grew a network of 12 Motus stations in western Montana and researchers tagged 120 birds and bats. The following year, IWC expanded the array to 23 Motus stations across Montana, Idaho and Oregon, and increased tagging efforts to more than 200 birds and bats. We have detected various species during migration, using this technology, renewing our appreciation for connectivity and our understanding of movement of small wildlife. The Motus network expansion in the West speaks to the collaborative interest many biologists and conservationists hold in unravelling migratory habits of small wildlife and conserving their habitat. In 2021, we are planning to install an additional 20-30 Motus stations throughout the West and as far as Mexico. The flourishing Motus projects in our region will provide species life-history information such as dispersal, survival, departure and arrival dates, and a better understanding of wildlife habitat connectivity throughout the West.