

## **Montana Bumble Bee Atlas Project - Engaging Community Scientists to Fill Distribution Gaps for Declining Bumble Bees in Montana (Poster)**

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Bumble bees provide vital pollination services to native ecosystems and agricultural production, yet these important pollinators face an uncertain future. Nearly one-quarter of North American bumblebee species face some degree of extinction risk. In the U.S., two species have been added to the Endangered Species Act (ESA), and several have been petitioned for listing, with positive 90-day findings and pending Special Status Assessments (SSA). Montana is home to 4 species with pending SSAs, but existing data limit our ability to accurately assess populations or effectively manage landscapes with evidence-based conservation measures. To address this shortfall, we will be implementing a Montana Bumble Bee Atlas in 2024. This comprehensive monitoring program will provide a baseline understanding of bumble bee populations and fill knowledge gaps in their current distribution, site occupancy, and habitat associations. The project will mirror the successful bumble bee atlas projects ongoing in 15 U.S. states, which have engaged thousands of volunteer community scientists who have conducted standardized inventories over broad geographic areas and generated over 50,000 bumble bee observations since 2018. The robust dataset created from this project can inform pending SSAs and ESA decisions, be used to develop regional and state bumble bee conservation plans, and provide information for land management agencies in creating evidence-based habitat management and restoration strategies to improve the survival and recovery of at-risk bumble bees.