

## Current Status of White-Nose Syndrome and Bat Monitoring Efforts in Montana

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White-nose syndrome (WNS), the disease caused by the cold-adapted fungus, *Pseudogymnoascus destructans* (Pd), has killed millions of North American bats since its detection in New York in 2006. National surveillance efforts have tracked the spread of Pd and WNS westward across North America, and in 2019, partners in Montana began collaborating on a project to assess spread and impact on Montana's bats. This effort includes annual statewide monitoring to estimate the distribution of the fungus and disease. We conducted hibernacula surveys, live animal trapping, and pooled guano and environmental sampling in the winter and spring at hibernacula, emergence sites, and maternity roosts. We first detected Pd in eastern Montana in 2020, followed by the disease, WNS, in 2021. In 2023, we surveyed 31 sites; nine sites were Pd-positive and four were confirmed/suspected positive for WNS, including two of the state's largest known hibernacula for *Myotis* species. To date, Pd has been detected in four species across 16 counties within Montana. WNS has been documented in three species within six of those counties. While we documented the continued spread of Pd and WNS, we have yet to detect either in the western-most portion of the state, including west of the Continental Divide. This effort, coupled with annual acoustic monitoring, as part of the North American Bat Monitoring Program to assess bat occupancy and activity, will inform decisions related to management and conservation strategies, including potential use of treatments specific to WNS or ecological approaches toward offsetting the costs of disease.