
****BATS IN BUILDINGS: ASSESSING HUMAN STRUCTURES AS ROOST SITES IN GLACIER NATIONAL PARK (POSTER)**

Cheyenne E. Stirling *, Department of Ecology, Montana State University, Bozeman
Andrea R. Litt, Department of Ecology, Montana State University, Bozeman
Lisa Bate, Glacier National Park, West Glacier, MT

Many bat populations are declining due to factors such as spread of white-nose syndrome (WNS) and changes in land use, increasing the need for information to prevent further declines. The little brown bat (*Myotis lucifugus*) is a species of concern in Montana, is susceptible to WNS, is the most common bat in Glacier National Park (GNP) and is frequently found roosting in buildings. We sought to document the locations and types of bat roosts in human structures throughout GNP. We conducted daytime inspections of 579 of the >900 buildings in GNP during summer 2015. When we detected a roost, we determined whether it was a day or night roost and recorded characteristics of the building and roost. In total we found 451 roost sites; most were night roosts. Buildings with tin siding were less likely to be used as night roosts, whereas buildings with masonry were more likely to be used as night roosts. Buildings with a bat house were more likely to be used as day roosts. We also found some evidence that bats preferred to day roost in buildings with tin roofs or logs. These baseline data on locations and numbers of bat roosts will allow biologists to better assess potential impacts of WNS should it arrive in Montana. These data also will provide GNP staff with the necessary information to develop mitigation measures to protect bats.