

## **Leveraging Conservation Status Assessments to Highlight Threats, Trends, and Information Needs of Montana's Species of Concern**

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Since the late 1980s the Montana Natural Heritage Program has maintained a list of Species Of Concern (SOC) to highlight rare and imperiled species within the State. This list is used by management agencies and in project planning and environmental review to mitigate impacts to these species and focus research and conservation. Ranking currently uses a standardized assessment following guidance from NatureServe that scores species on their rarity, threats, and trends. Recently the program has aggregated this information in a relational database framework that allows greater access to these data and comparison of risk factors across species and allows analysis of common threats and negative trends as well as highlighting information needs for highly threatened species or those that are undergoing rapid decline. In this analysis we found that the top three threats of moderate to high severity were impacts of climate change, habitat loss through conversion to agriculture, and impacts of invasive species or disease. Across vertebrate SOC species 46% had trends from slight declines to stable or increasing, 11% were undergoing moderate to significant declines, and 43% had no trend data available. Taxonomic groups with broad structured monitoring programs such as birds and fish had higher numbers of species with current trend data while mammals and reptiles generally lacked such data. Many species with high threats were actively monitored, but the current status of other species remains uncertain as trend data are unavailable. Through this analysis we were able to identify species most at risk of unrecorded declines.