

**MONTANANS' PERSPECTIVES ON WOLVES AND WOLF MANAGEMENT IN  
MONTANA: QUANTATIVE HUMAN DIMENSIONS SURVEY SUMMARY**

**F23AF00123/W-192-R 2024 ANNUAL PROGRESS REPORT**

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## **Summary of Annual Work**

In 2024, work on this project primarily focused on analyses of survey data and communication of these results in the form of a peer-reviewed publication and conference presentation. As per our contract, we submitted a manuscript to a peer-reviewed outlet in December of 2024; this article is currently under review at *Conservation Science and Practice*, a journal of the Society for Conservation Biology and will be available publicly if/when accepted for publication. We include the title and abstract below, along with the descriptive figures that mirror results presented in last year's interim report. The manuscript expands on these descriptive statistics using a regression analysis associating explanatory variables with the increasing tolerance seen across Montana over the last 10 years; we situate these results in the global literature on stakeholder attitudes toward wolves and the extant understanding of how those attitudes tend to change over time in relation with other factors. We also communicated survey results to relevant stakeholders at the 2024 Annual Meeting of The Wildlife Society Montana Chapter in Butte, MT. Lastly, we recruited a graduate student (Brainna Lipp, M.S. level) whose primary funding comes from non-project sources, but will join the project during summer of 2025 to assist with remaining deliverables.

### **MANUSCRIPT TITLE: Increasing tolerance of wolves in Montana, U.S.A. (2012-2023)**

#### **MANUSCRIPT ABSTRACT:**

Gray wolf (*Canis lupus*) conservation has been particularly controversial in the Northern Rocky Mountains, although reliable human dimensions data is sparse. Globally, public attitudes toward wolves are consistently positive with exceptions among rural residents, especially hunters and

landowners; results vary about whether attitudes improve or deteriorate over time. Here, we describe a decade of changing attitudes toward wolves in the large, rural state of Montana using three, statewide mail-back surveys (2012-2023; total n = 7607). Results, weighted for inference, showed high and increasing public tolerance for wolves. Tolerance was low among wolf hunters and landowners, but increasing among ungulate hunters. Among residents, a decreasing majority tolerated wolf hunting, whereas a decreasing minority tolerated wolf trapping. Tolerance of wolves was spatially correlated toward population centers and associated with respondents' identities, values, and wolf-related experiences. We discuss these results, future work needed to explain these trends, and implications for wolf management broadly.

Select Manuscript Figures:

MT residents' tolerance for wolves, wolf hunting and wolf trapping

1 = 'Very intolerant' 5 = 'Very tolerant'

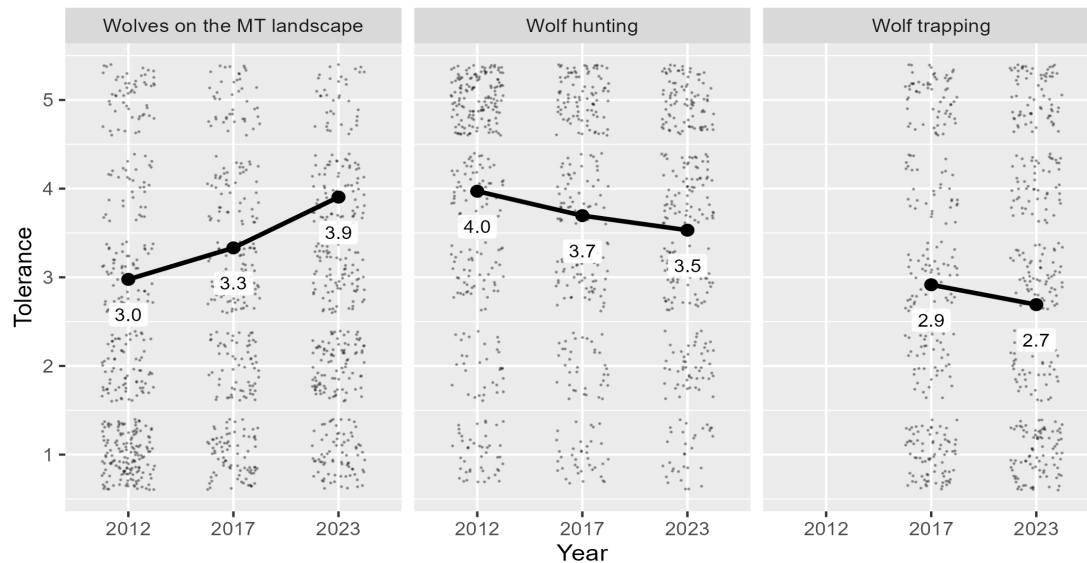


Figure 1 - Mean scores for general resident adults of Montana for the questions 'How tolerant are you of... ..wolves on the Montana landscape', '...wolf hunting,' and '...wolf trapping' for years 2012, 2017, and 2023. Background points are a randomly selected slices of responses for each question/year, jittered to show distribution.

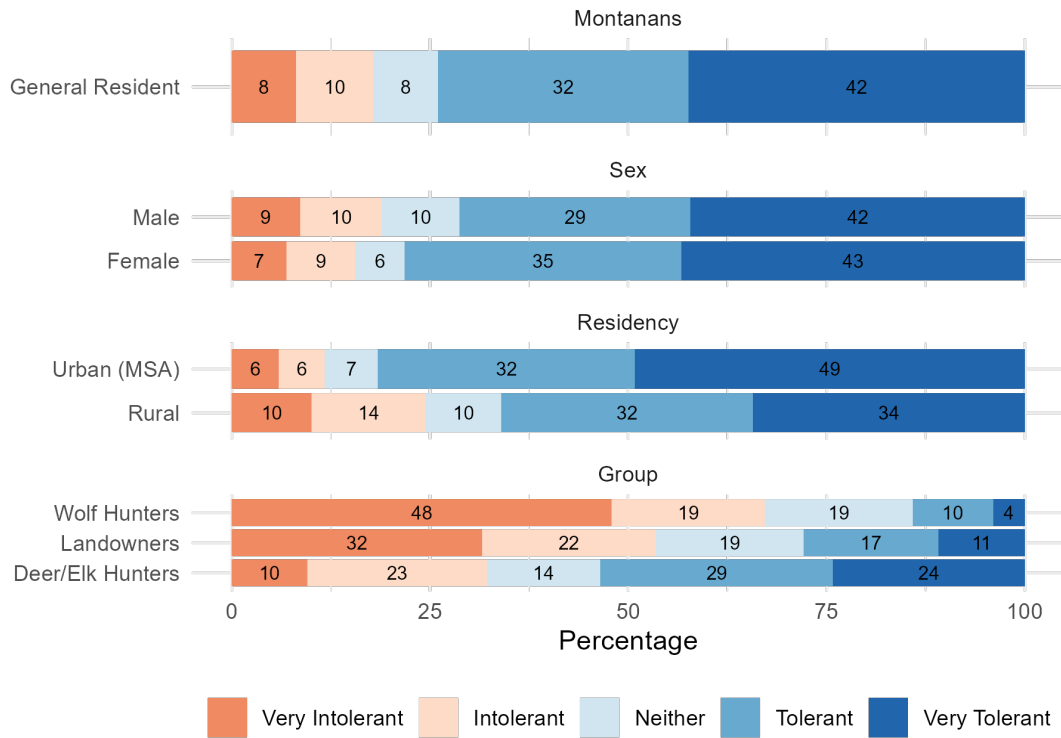


Figure 2 - Percent responses by response categories for tolerance of wolves on the Montana landscape for general residents and by sex, urban/rural, and among wolf hunters, large landowners, and deer/elk hunters in 2023.

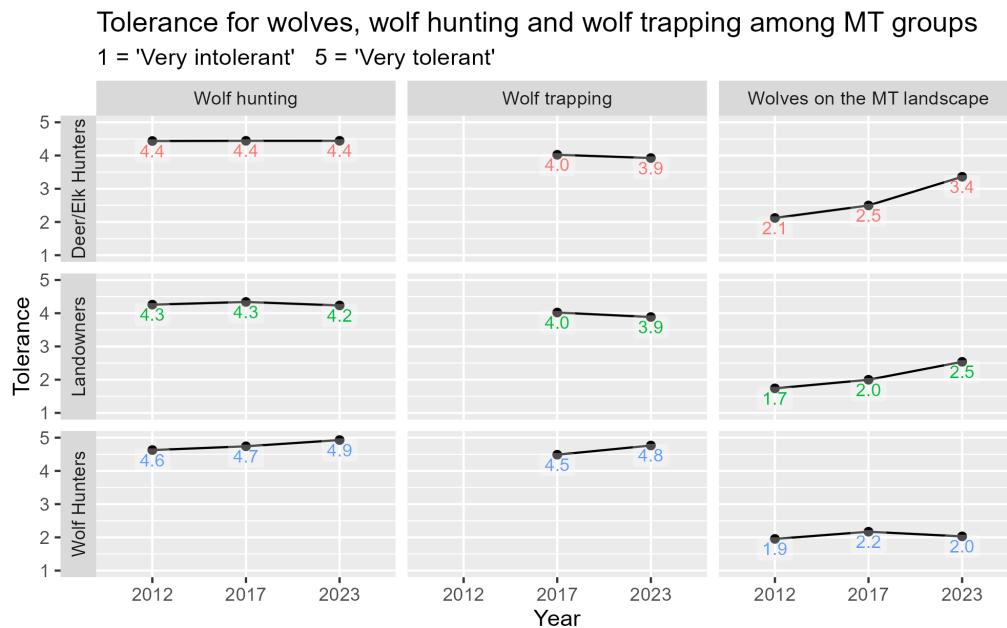
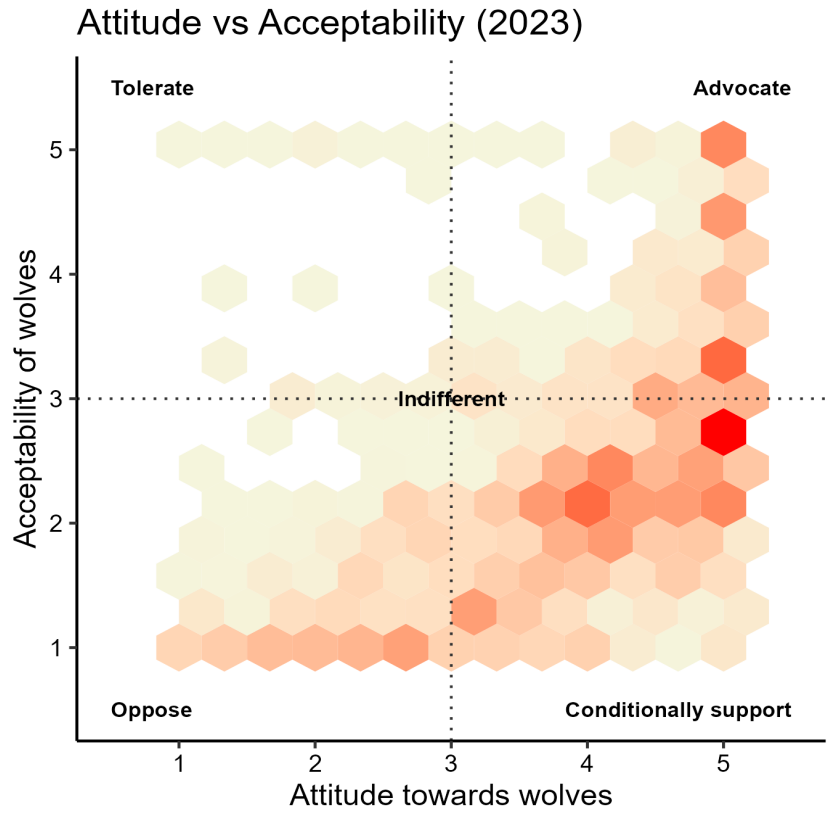


Figure 3 - Mean scores for deer/elk hunters, wolf hunters, and large landowners for the questions 'How tolerant are you of... ..wolves on the Montana landscape', '...wolf hunting,' and '...wolf trapping' for years 2012, 2017, and 2023.



*Figure 4 - Heatmap of general residents' attitudes toward wolves intersected with their acceptability of wolf impacts in 2023.*