

****Responses of Elk to Changes in Travel and Access Management**

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Rifle-hunting on land accessible to the public is the main tool wildlife managers use to manage the abundance of elk (*Cervus canadensis*) in the western United States. Elk are increasingly located on land inaccessible to hunters during rifle season in the western United States, decreasing the ability of managers to reduce the abundance of elk and harvest opportunity for hunters. Management actions are used to balance hunting risk across landscapes and assumed to influence the behavior of elk, but evidence is limited. We evaluated how restricting hunter access and motorized routes influenced the behavior of elk during rifle season in the northern Sapphire Mountains, Montana, USA. We used locations of female and male elk during the rifle season during 2014-2015 prior to restrictions and again in 2019-2020 following restrictions to evaluate elk responses. We hypothesized restrictions would influence the behavior of elk more strongly than other factors since elk have been shown to respond strongly to changes in hunting risk. Additionally, we evaluated how access of elk to hunters during rifle season changed over time to understand patterns in the location of elk. We found no support that elk responded to restrictions. Preexisting use of adjacent land by elk and restrictions mainly to motorcycles likely decreased efficacy of restrictions. Further, access of elk to hunters was low, and decreased over time for male elk.