Factors Influencing Wildlife Use Of Underpasses And Culverts Along I-90 In Western Montana[TWS]

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Underpasses and culverts have potential to mitigate negative impacts of roads by maintaining connectivity between populations and decreasing wildlife collisions with vehicles. Knowledge regarding factors affecting wildlife use of highway crossing structures allows managers and planners to make informed decisions regarding highway mitigation efforts. Using heat and motion sensitive cameras, we monitored 7 underpasses and 3 culverts for 1 year along Interstate 90 (I-90) in western Montana. We assessed wildlife use of crossing structures in relation to surrounding variables such as human presence, topography, and distance to hiding cover. We obtained 1658 wildlife photos at underpasses and 52 photographs of animals in culverts. Primary users of underpasses were ungulates, 3 black bears, and 5 coyotes. Although terrain funneled ungulates toward underpasses, ungulate use of underpasses was not related to human structures or hiding cover. Infrequent carnivore use at underpasses may indicate that they use crossing structures opportunistically.