

Mountain Goat Response to Human Activity in Jasper National Park

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ABSTRACT: Mountain goats (*Oreamnos americanus*) typically exhibit low tolerance for human activity, and the degree to which they can adjust their behavior to accommodate human activity is poorly understood. The Glacier Skywalk, an interpretive glass-bottomed viewing platform and tourist attraction, was constructed in Jasper National Park in 2012 and 2013. Mountain goats extensively used the cliffs and other habitats below and adjacent to the Glacier Skywalk, and potential impact to mountain goats was a primary concern associated with the project. We used remote cameras to document seasonal, diel, and demographic use by mountain goats at the Glacier Skywalk over a 9-year period (2011-2019) and conducted focal animal sampling to measure responses to construction in 2013. Unlike most other places where they have been studied, goats at the Glacier Skywalk exhibited high tolerance for human activity. Seasonal and diurnal use by goats in 2012 and 2013 as the Skywalk was being built was like that observed prior to construction in 2011, and the amount of use increased in some years during operations (2014-2017). Behavioral observations indicate that goats access the site primarily to obtain minerals. Goats did not abandon the site during construction activities, were observed on the cliff the same day as blasting and were also present during periods of high human visitation during operations. Effects to mountain goats were lower than predicted in an environmental assessment for the Glacier Skywalk, and our results indicate that some mountain goat populations can accommodate high levels of human activity, particularly around mineral licks.

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