Grizzly Bear Scavenging of Carrion on the Northern Yellowstone Winter Range (1997-2012)

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The Northern Yellowstone Winter Range (NYWR) in northwestern Wyoming and southwestern Montana is an important winter migratory destination for ungulates. The NYWR is within the Greater Yellowstone Ecosystem (GYE), a landscape characterized by a complex ecological system of predators, scavengers, and ungulates. Grizzly bears (*Ursus arctos*) are dominant members of the scavenging community throughout the spring. However, little is known about factors associated with grizzly bear use of carcasses. Of particular interest to managers is how habitat and anthropogenic factors are associated with carcass use. Such information, for example, may be useful to manage spring recreation in important bear foraging areas to reduce conflict and support conservation efforts. We used logistic regression to analyze spring survey data from 23 transects located in Yellowstone National Park and the Gallatin National Forest during 1997–2012, to identify factors associated with grizzly bear scavenging of winter- or predator-killed ungulates. Multi-model inference was used to evaluate relative support for a set of *a priori* candidate models containing environmental and temporal correlates. Our preliminary findings showed support for models with distance to forest edge, road density, and elevation. Results indicated negative relationships between these factors and probability of carcass use. Our results suggest that spatial heterogeneity in landscape-level habitat characteristics and human activity affect grizzly bear use of a valuable spring food source.