

DEVELOPMENT OF FALL CATTLE GRAZING PRESCRIPTIONS TO IMPROVE DEER AND ELK FORAGE^{TWS}

Jeffrey J. Short, and Dr. James E. Knight
Montana State University, Bozeman 59717

Cattle (*Bos taurus*) and wild ungulates have long been viewed as competitors. In the future the best method of preserving wildlife and cattle will be to manage them cooperatively. The objective of this project was to examine the use of fall cattle grazing to improve wildlife forage. We looked at the effects of four fall cattle grazing levels on elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*) and white-tailed deer (*Odocoileus virginianus*) forage. The hypothesis of this study is that fall cattle grazing will improve the quality of elk and deer forage the following spring and summer. The effects of fall grazing on wildlife forage were examined on the Blackfoot Clearwater Wildlife Management area in westcentral Montana. A randomized complete block design with five replications was used. Cattle were grazed in enclosures during the fall of 1997 and 1998. Grazing levels were 0 percent removal (control), 50 percent removal, 70 percent removal, and 90 percent removal. During spring and summer we measured plant species composition, plant diversity, dead plant material, green forb biomass, and green grass biomass to evaluate quality of elk and deer forage. Preliminary data from the first year of this two-year study suggests significant positive differences in wildlife forage due to cattle grazing intensity. Information generated will be useful in making management decisions on ranges that are important spring and summer wildlife habitat.