

***“Use of strategic supplement placement and herding to extend cattle grazing in mountainous terrain: A demonstration.”*** Dennis Froeming 1, Derek Bailey 2, Christina Black 2, Robert Welling 3, Wayne Butts 4, David Voldseth 5, Errol Galt 6 and Craig Hereim 7. 1Rangeland Consultant, Bozeman, MT; 2Department of Animal and Range Sciences, Las Cruces, NM; 3Ridley Block Operations, Vaughn, MT; 4US Forest Service, Harlowton, MT; 5TG Ranch, Martinsdale, MT; 671 Ranch, Martinsdale, MT; 7Hereim Ranch, Martinsdale, MT. Abstr., Ann. Mtg. Soc. Range Manage. Vancouver, BC, Feb., 2006.

**ABSTRACT:** A study was conducted to evaluate the effectiveness of strategic supplement placement for improving livestock grazing distribution on the Comb Butte Allotment located in the Lewis and Clark National Forest in central Montana. Low-moisture blocks were placed on ridges and areas that previously received little livestock grazing. Cow-calf pairs were herded away from streams and bottoms to supplement locations two times per week during early afternoon. Key areas were selected in areas that historically received moderate to heavy use.

Forage utilization was measured at 4 equally distant areas located 0 to 300 m from key areas and supplement sites using height-weight techniques. In 2002, forage grazing use increased by similar amounts ( $P > 0.10$ ) near both supplement sites and key areas ( $21 \pm 4$  and  $19 \pm 2$  percentage points, respectively). Again in 2003, forage utilization near supplement sites ( $24 \pm 4$  %) was equivalent ( $P > 0.10$ ) to levels measured in key areas ( $23 \pm 2$  %). Slope and distance to water did not affect ( $P > 0.10$ ) forage use measured in this study. Forage use was greater 0 to 100 m from supplement than areas 200 and 300 m away ( $P < 0.05$ ). As a result of improved grazing distribution resulting from strategic supplement placement and periodic herding, cattle grazing use was extended by 1 week in 2002, and a 10% reduction in permitted cattle numbers was restored in 2003.