

REST, ROTATION AND RESEARCH AT MONTANA'S MATADOR

PHOTOS BY SUSAN MARXER

The Sage Creek Rest-Rotation Research Project at the Matador Ranch in Montana shows how properly managed grazing can actually enhance vegetative cover and provide

excellent filtration during periods of severe runoff. The area to the left of the fence has been grazed under a rest-rotation plan since 1976. The plot on the right has been closed to cattle during that period. The grazed area is clearly the more vigorous and healthy. The area in the photo is part of the Basin Creek Westslope cutthroat trout fishery with "huge" native fish.



The Long Creek Study was a five-year cooperative study between the Forest Service, Matador Cattle Company and Montana State University to scientifically measure the effects of livestock grazing on stream channel shape and vegetation. The pasture was completely rested in 1992 and 1993 to allow willows to get better established. Beavers, however, were left on their own. Not only did they use up whatever willows they

could get, the dams they built with cinquefoil collapsed sending more silt downstream in 1992 than could happen in many years of grazing. Most of the variation in vegetation is due to timing and amount of rainfall and temperature.



Bear Creek in the Centennial Valley showing unrestricted beaver activity. The creek contains pure Westslope cutthroat trout. Matador Cattle Company is working with federal agencies to restore habitat.

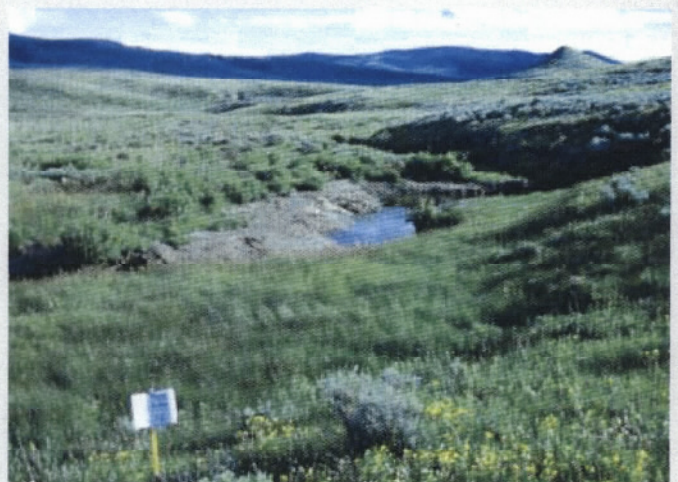


ABOVE: Lone Butte pasture in late August 1990 after grazing. It will be rested for 35 months to allow the willows to become better established. BELOW: Same site in early July 1993 after 35 months of rest. Where are the willows?





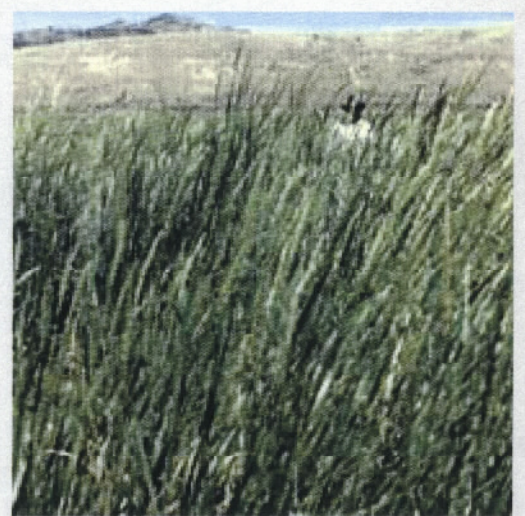
LEFT: Another area of Lone Butte pasture, August 25, 1990, with a green swath of willows in the middle distance. RIGHT: This shows the same area August 27, 1993, after a day of grazing. The difference in climate tells a lot about ranching in Montana. The absence of willows tells a lot about beavers.



Lone Butte pasture photos before and after three years of rest. In 1993, the stream banks gape and the willows are gone.



Clayton and Ray Marxer on the first day of monitoring, August 25, 1990.



Landon Meadows on the Matador Ranch, Summer 1991. Tall grass almost hides Ray Marxer. PHOTO: Dale Marxer.