

THE EFFECTS OF SEASONAL GRAZING ON WINTERFAT IN THE SHORTGRASS PRAIRIE OF SOUTHCENTRAL NEW MEXICO

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Key Words: Plant Responses, Growth, Development

Growth patterns of winterfat are being studied on the Corona Range and Livestock Research Center to determine responses of the plant to seasonal grazing by cattle. Two seasonal treatments and one control treatment were established in June 1994 to monitor differences in plant growth throughout the next two growing seasons. The first treatment includes plants that were grazed in the fall of 1993 and are currently protected from grazing. The second treatment are plants that were grazed during the summers of 1994 and 1995. Portions of the summer treatment plants are being protected from grazing to use for comparison to the grazed plants. The control treatment is an area on the ranch that has not been grazed for several years and these plants will be used to compare the two seasonal grazing treatments.

Monitoring is done by measuring growth increments on specific branches that were identified and marked at the

beginning of this study. Measurements were taken every two weeks during the summer and once every month during the fall. The difference in growth increments from each treatment were be compared.

Overall, winterfat plants grew differently in 1995 when compared to 1994. This was attributed to drought conditions. Many treatments with positive growth increments in 1994 lost growth in 1995. Plants subjected to fall grazing in 1995 still had the greatest positive growth.

Initial early data indicate that Fall-only grazing seems to be the best way for winterfat to achieve the most growth and biomass. Fall grazed plants grew an average of 61% more than those plants grazed in the summer or the plants located in the control plots. Protection for more than one growing season did not result in any increased growth on winterfat plants. Management implications for ranchers could be higher amounts of winter forage available for cattle if pastures with high densities of winterfat were deferred until late fall or early winter.