

RANGE FERTILIZATION

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(Key Words: Fertilizer, Standing Crop)

Past research at the Ft. Stanton Experimental Ranch indicated positive results from range fertilization. Responses for the new ranch at Corona, representing different soils and vegetation patterns are unknown. Replaced fertilizer plots were established on shallow calcareous, and deep sandy soils at the Corona Range and Livestock Center in 1991. In 1994 application rates of 0, 30, 60, and 90 lbs/ac of actual N in the form of urea were evaluated. On shallow calcareous soils the 60 lb/ac rate resulted in the greatest standing crop (2556 lbs/ac). Forb standing crop was also the greatest at this rate (924 lbs/ac), a increase of nearly 500 lbs/ac over that of the control.

On deep sandy soils, less difference in treatments was noted. The most effective treatment in 1994 was the 30 lb/ac rate with a grass standing crop of 2651 lbs/ac and a forb standing crop of 592 lbs/ac. This is compared to the control with a standing crop of 1819 lbs/ac of grass and 288 lbs/ac of forbs. The 90 lb application rate had less grass standing crop (1598 lbs/ac) but a much higher forb crop (1896 lbs/ac) than the control.

HERBAGE PRODUCTION ON CRP GRASSLANDS

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(Key Words: Grass Yield, Burning)

Clipping studies were initiated in 1994 to determine the annual herbage production of seeded Conservation Reserve Program (CRP) lands. Clipping locations were distributed from Clayton to Lovington and involved several different seeding mixtures. All areas were clipped at least two times during the season, once in late June and again in late September.

Annual herbage production ranged from a low of 456 lbs/ac on a blue grama mixture near Mosquero to a high of 4530 lbs/ac on a yellow bluestem seeding near San Jon. Native mixtures of sand lovegrass, indiagrass, switchgrass, big bluestem and blue grama; or sideoats grama, blue grama, sand bluestem, and indiagrass near Sedan produced approximately 1600 lbs/ac. These values were similar to the values for weeping lovegrass clippings near Crossroads, Portales, and Clovis (approximately 1250 lbs/ac). Burning of yellow bluestem and weeping lovegrass did not affect the annual herbage production. Burning weeping lovegrass resulted in a slightly higher annual production (1577 vs 1344 lbs/ac), while burning of yellow bluestem increased production from 4227 to 4530 lbs/ac near San Jon, and increased production from 20556 to 2172 lbs/ac near Clayton.