

## IMPROVING RANGE EWE PRODUCTIVITY

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Supplementation

Several studies have been conducted on the NMSU Corona Range and Livestock Research Ranch investigating effects of supplementation programs on ewe productivity (Ramsey, 1995 and McFadin et al., 1996). These studies revealed no real benefits of supplementing ewes during the last trimester with a 25% CP supplement (.33 lb/day) or a 42% CP supplement (providing ruminal bypass protein and fed at .25 lb/day). In both studies, stocking rates were moderate and forage availability would be considered good. This past year, another study was initiated to compare the timing of supplementation. Ewes, 225, were divided into four pastures and pastures were allotted to treatments. Treatments were: no supplement control, supplement during late gestation only, supplement during early lactation only, supplement during late gestation and early

lactation. Ewes were supplemented with 25% CP fed at .33 lb/head/day. The average weaning weight and estimated lamb crop percentages are presented in Table 1. The 6 lb advantage for the ewes supplemented during late gestation and early lactation resulted in \$5.40 additional gross income. Feed costs were \$3.50 per head. So, if cost of feeding (vehicle and labor) was included, no advantage was realized in the supplementation program. We will repeat this experiment during the spring and summer of 1997.

### Literature Cited

- McFadin, E. L., T. T. Ross and R. A. Renner. 1996. Effects of different protein diets on ewe and lamb performance. *Proc., West. Sec., Amer. Soc. Anim. Sci.* 47:23-26.
- Ramsey, W. S. 1995. Finewool range ewe and lamb production under different protein supplementation regimes. Ph.D. Dissertation, New Mexico State University. Las Cruces.

Table 1. Weaning weights of lambs and percentage lamb crop weaned from ewes receiving four dietary supplemental programs.

Treatment	Weaning weight (lb)	Lamb crop (%) <sup>a</sup>
No supplement	89 <sup>b</sup>	100
Supplement late gestation only	85 <sup>b</sup>	93
Supplement early lactation only	89 <sup>b</sup>	88
Supplement late gestation and early lactation	94 <sup>c</sup>	98

<sup>a</sup>Lamb crop percentage is number of lambs weaned per ewe exposed to rams. Data were not statistically analyzed.

<sup>b,c</sup>Means with different superscripts differ ( $P < .05$ ).