

Adjustments were made in livestock and grazing management in accordance with the findings of a drought adjustment study in New Mexico.^{6/}

A 20-percent decrease in forage with no change in the grazing permit increases cash costs 7 percent. A 20-percent increase in forage increases cash costs 4 percent (table 13). Net cash income increases an average of 14 percent and decreases an average of 14 percent with the 20-percent increase or decrease in range forage. If the Federal range grazing permit also increases or decreases proportionally with changes in forage, net cash income will increase 25 percent or decrease 22 percent (table 14).

Reduction in the Federal Range Grazing Permit

An animal unit month reduction of 20 percent in the Federal range grazing permit, with only reductions in the livestock inventory being considered, resulted in a reduction in gross ranch income of 11 percent and a reduction in cash costs of 10 percent (table 15).^{7/} With these adjustments, net cash income of the five ranches was reduced an average of 12 percent.

LONG-RUN COST AND INCOME EFFECTS OF CHANGES IN LIVESTOCK PRICES, RANGE FORAGE SUPPLIES, AND FEDERAL GRAZING FEES AND PERMITS

In the long run the short-run losses in ranch income may be offset by investment in additional land or range improvement and similar opportunities. Whether these opportunities are profitable will depend upon the additional costs and the addition to range forage supply.^{8/}

If profitable adjustments are not possible, in the long run eventual reduction in the capital structure of the ranch will occur. For example, if the average reduction in net ranch income of the 14 representative ranches were caused by a 20-cent

^{6/} Boykin, C. C., Gray, J. R., and Caton, D. D. Ranch Production Adjustments to Drought in Eastern New Mexico. N. Mex. Agr. Expt. Sta. Bul. 470, Dec. 1962.

^{7/} Ranch production adjustments with a reduction in the Federal range grazing permit, such as leasing additional rangeland, improving rangeland, or buying additional feed, were not considered. Therefore the livestock inventory was reduced 12 percent.

^{8/} Pingrey, Hazen B., and Dortignac, E. J. Economic Evaluation of Seeded Crested Wheatgrass on Northern New Mexico Rangeland. N. Mex. Agr. Expt. Sta. Bul. 443, Feb. 1959.

Pingrey, Hazen B., and Dortignac, E. J. Cost of Seeding Northern New Mexico Rangelands. N. Mex. Agr. Expt. Sta. Bul. 413, 1958.

Caton, D. D., McCorkle, C. O., Jr., and Upchurch, M. L. Economics of Range Improvement on Western Grazing Lands. Jour. Range Management, Vol. 13, No. 3. 1960.