increase on 1960 average grazing fees, with livestock prices and production being constant, average ranch capital value could be reduced by $6,500. The average reduction in net ranch income capitalized at five percent is $325. A 20-percent reduction in the grazing permit, under the same assumptions, would reduce by $13,120 the average capital value of the five representative ranches to which the permit reduction was applied. This is the average reduction of net ranch income of $656 capitalized at five percent.

Summary and Conclusions

The purpose of this study was to evaluate the economic effects of alternative levels of livestock prices, range forage supplies, grazing fees, and grazing permits on the organization and net income of representative types and sizes of cattle ranches that use Federal grazing lands in the Southern Intermountain and Southern Desert Ranching Areas of Arizona and New Mexico.

The representative ranches vary in size from 34 animal units to 512 animal units with a total investment per animal unit of from $256 to $722. These representative ranches have average costs, including cash costs, depreciation, and an allowance for operator and family labor, of $49 per animal unit, and an average net income of $15 per animal unit. About half of the ranches do not cover the computed total costs, and four of the ranches do not cover total costs exclusive of the allowance for operator and family labor. Ranches of more than 100 animal units in size are estimated to have positive net incomes. A slight change in livestock prices has a more than proportionate effect on the number of animal units necessary to cover costs.

The cost and income effects of changes in Federal range grazing fees and grazing permits were evaluated for a selected number of the representative ranches. Under the assumptions of the study, each 20-cent increase from the 1960 average grazing fee levels would reduce net ranch income an average of $325. A reduction of 20 percent in the grazing permit would reduce net ranch income an average of $656. A 20-percent decrease in range forage supply could reduce net ranch income up to an average of 22 percent. With no changes in livestock prices or production these reductions in net ranch income could, over time, reduce the capital value of the representative ranches.