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COSTS and RETURNS



**Southwest
Cattle
Ranches**

1970

ABSTRACT

Net returns on Southwest cattle ranches for 1970 dropped 18 percent below the 1969 records to average \$10,300. Although ranchers managed to reduce production expenses in a year of rising costs, especially for feed and grazing fees, the second year of drought reduced calving rates and calf sales and forced the early sale of retained 1969 steer calves that ranchers had planned to market late in 1970. Ranch receipts were substantially above the 1965-67 average but well below 1969. Investment per ranch reached a new high of \$526,000 in 1970 because of land and building appreciation.

Keywords: Costs and returns, Southwest, livestock ranches.

FARM COSTS AND RETURNS STUDIES

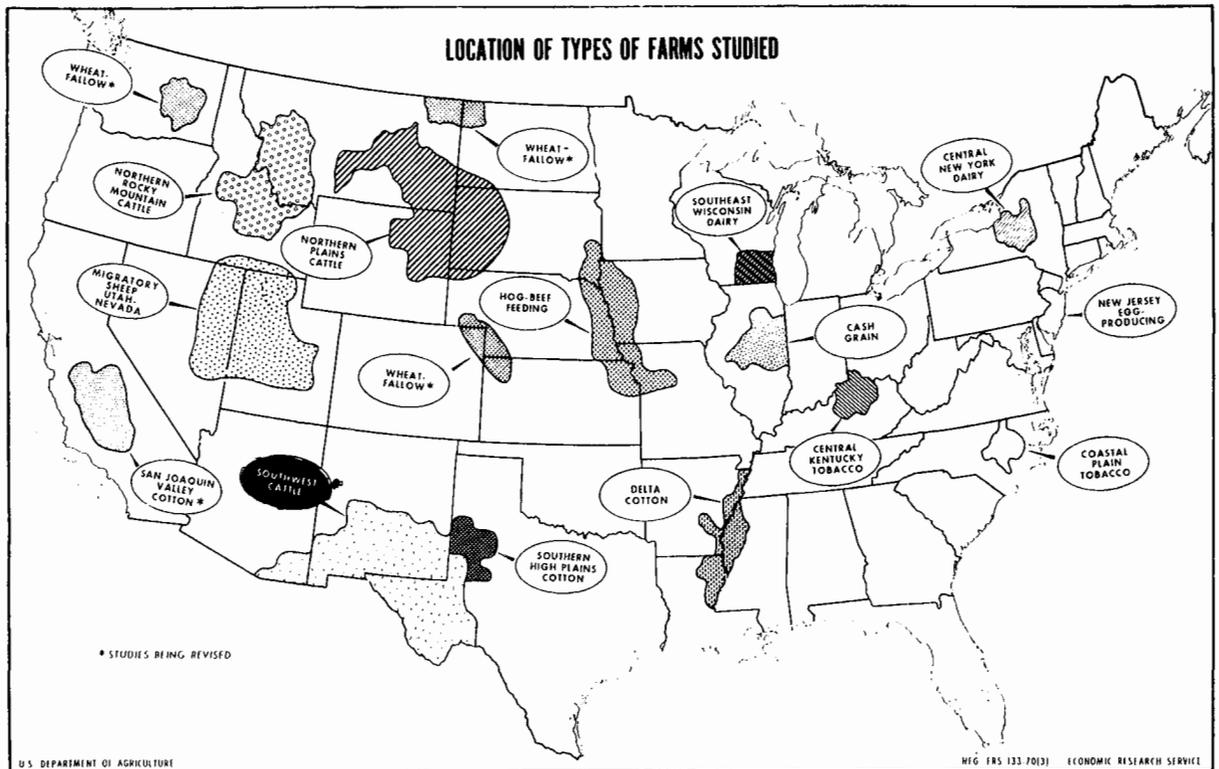
This report is part of a continuing nationwide study of costs and returns on commercial farms and ranches in selected farming regions. The study is conducted under the general supervision of Wylie D. Goodsell, Farm Production Economics Division, Economic Research Service. Objectives, methodology, procedure, and terms are uniform for all areas studied.

The costs and returns studies cover the following commercial farms and ranches by type and size:

Dairy Farms, Southeastern Wisconsin and Central New York
Cash Grain Farms, Corn Belt
Hog-Beef Feeding Farms, Corn Belt
Egg-Producing Farms, New Jersey

Cotton Farms, Mississippi Delta
Cotton Farms, Southern High Plains, Texas
Tobacco Farms, Coastal Plain, North Carolina
Tobacco-Livestock Farms, Bluegrass Area, Kentucky
Wheat-Fallow Farms, Pacific Northwest, Northern Plains, and Southern Plains
Northwest Cattle Ranches
Migratory Sheep Ranches, Utah-Nevada
Southwest Cattle Ranches

Information on the studies can be obtained from Farm Production Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C. 20250.



COSTS AND RETURNS

SOUTHWEST CATTLE RANCHES, 1970

By

James R. Gray, Wylie D. Goodsell, and Macie J. Belfield¹

INTRODUCTION

Cattle ranching is the predominant farming enterprise in a 34-county southwestern area in west Texas, southern New Mexico, and southeast Arizona (fig. 2). Operators of these ranches produce feeder calves for further conditioning and finishing in feedlots located in central Arizona, the Texas Panhandle, neighboring portions of New Mexico, and the Midwest.

On most ranches in the Southwest, cattle graze year-round on the sparse grasses and browse species of the area and require about 60 acres per animal unit (cow and suckling calf). Large areas of Federally-owned grazing land are common in western New Mexico and Arizona, whereas most lands in Texas and eastern New Mexico are privately or State owned.

The major source of income for these ranches is the sale of calves. About 260 high-quality calves are

produced each year from a typical herd of 300 brood animals. Calving percentages are usually in the mid-80's, and death losses vary from 2 to 4 percent, depending on the severity of early spring weather conditions and the frequency and severity of drought.

The typical ranch reported here is based on a survey of ranches with 200-500 head of brood cows, averaging about 300 head. About 40 percent of all ranches in the area with more than 100 head of cows and heifers are of this size range. Operators with less than 100 cows and heifers are either employed part-time off the ranch or have a major farming enterprise in combination with livestock. Operators with more than 500 head often have hired managers and a combination of enterprises such as crop farming, registered cattle, and cattle feeding.

COSTS AND RETURNS OF SOUTHWEST CATTLE RANCHES

Net returns in 1970 averaged \$10,030 per ranch, 18 percent less than the record high in 1969 (table 1), but 6 percent more than the 1965-67 average. Prices received in 1970 were very favorable—about 2 percent above a year earlier and 30 percent above the 1965-67 average. However, favorable prices were more than offset by lower production, because of drought, and higher expenditures for feed. In 1970, steer-calf prices averaged around \$34.55 per hundredweight, the highest since 1951, and about \$1.65 per hundredweight above 1969. Prices received for yearlings, cows, and bulls were also higher in 1970. Slaughter cows sold for around \$19.55 per hundredweight, 14 cents more than in 1969. Net ranch production was 8 percent below 1969 and down 16 percent from 1965-67. Prices paid were about 3 percent higher than in 1969 and 15 percent higher than in 1965-67.

Southwest ranchers planned to take advantage of the favorable price situation in 1969-70 by retaining an unusually large number of steer calves in 1969 to be sold in 1970 at heavier weights. Continuation of the drought into 1970, however, forced them to dispose of these animals as well as almost all steer calves produced in 1970. Cow numbers per ranch, which were reduced in 1969, remained unusually low in 1970.

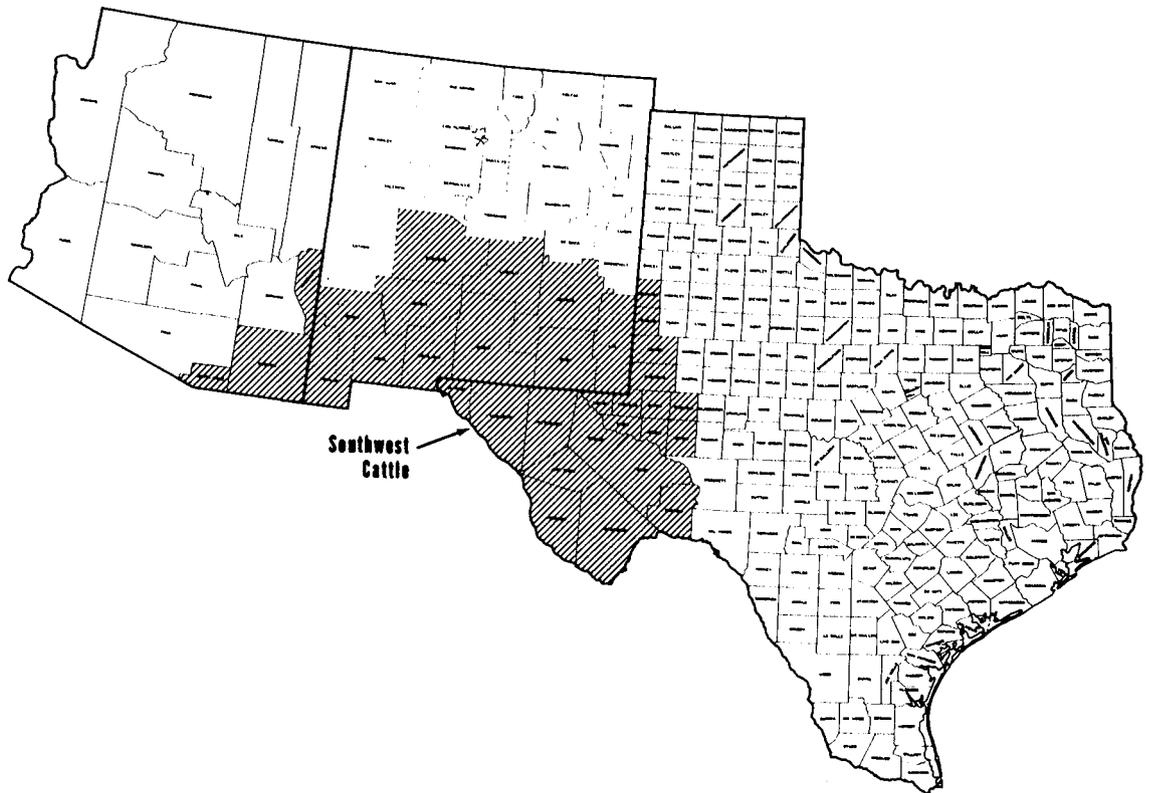
In 1970, precipitation was well below average in the area, and breeding herds were fed hay and grain during the late spring and during parts of the summer and fall. Most counties in the eastern portion of the study area were declared drought-disaster counties. This made ranchers in them eligible for emergency pasturage, feed, and credit programs.

Calving percentages dropped to the low 80's, but death losses were held to low levels by supplemental feeding. Average market weights of 410 pounds for steers and 392 pounds for heifers were down from the 428-pound and 408-pound levels in 1969.

In 1970, the average gross ranch income was 7 percent less than the 1969 peak, mainly because of lower calving rates and fewer feeder calves sold.

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LOCATION OF SOUTHWEST RANCHES STUDIED



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However, cash receipts from yearling steers were unusually high in 1970 because of liquidation of these animals. Without this liquidation, the cash receipts would have fallen below \$30,000, a 25-percent reduction from 1969 levels.

Total ranch capital of \$525,970 per ranch was record high in 1970, 27 percent over the 1965-67 average, but only 1 percent over the previous year. Changes in land values were mainly responsible for ranch capital changes. Land values decreased in the Arizona portion of the study area, held constant in New Mexico, and increased moderately in the Texas portion.

The investment in land and buildings, including range structures, was 84 percent of the total ranch capital. The livestock investment made up 14 percent of the total, and machinery investment only 2 percent.

The major operating expense on these ranches is feed, including grazing fees. In 1970, this cost was a fifth higher than in 1969 and 35 percent of total expenses. The 1970 feed purchases consisted of 76 tons of hay at \$37.50 per ton, 22 tons of protein concentrate at \$100 per ton, plus grains, salts, and minerals.

Public grazing costs increased substantially. Permit fees increased from 33 cents per animal unit month in 1969 to 44 cents in 1970. About 3,300 acres of State-owned land were leased at an average fee of 29 cents per acre, and 4,110 acres of private land were leased for 56 cents per acre.

Southwestern ranchers buy replacement livestock each year, mainly bulls. In 1970, replacements were held to a minimum as ranchers sharply reduced this expense. On the average, only 3 bulls and 2 yearling heifers were purchased. Favorable market prices for cattle inflated replacement-animal prices. Ranchers paid an average of \$470 per bull.

Other livestock expenses consist of medicines, vaccines, and veterinary fees. Although the total quantities of medicines and veterinary services usually remain the same for the cattle herd each year, expenses for these items have been increasing 6 to 7 percent each year because of price increases. In 1970, these expenses increased 5 percent.

Hired labor expenses ranked second only to feed and grazing fees in 1970. Labor costs consisted mainly of payments for a full-time man plus about 3 months of day labor. Wage-rate increases prior to 1970 were

Table 1.—Costs and returns, Southwest cattle ranches

Item	Unit	Average 1965-67	1969	1970 ¹
Total land operated ²	Acre	17,720	17,720	17,720
Land owned	do.	10,160	10,320	10,320
Livestock on ranch:				
All cattle	Number	391	393	395
Cows and heifers, 2 years old and over	do.	297	309	277
Calf crop	Percent	88	85	84
Total ranch capital, Jan. 1 ³				
Land and buildings	Dollar	414,590	519,620	525,970
Livestock	do.	353,350	434,450	440,440
Machinery and equipment	do.	50,670	73,320	73,150
Crops	do.	10,570	11,850	12,380
Crops	do.	0	0	0
Total cash receipts	do.	31,313	39,602	35,589
Calves	do.	17,972	19,869	18,126
Steers and heifers	do.	5,799	4,776	10,424
Other cattle	do.	7,542	14,957	7,039
Value of perquisites	do.	1,409	1,772	1,791
Inventory change:				
Livestock	do.	376	-1,848	-788
Crops	do.	0	0	0
Gross ranch income	do.	33,098	39,526	36,592
Total operating expense				
Feed and grazing fees	do.	23,659	27,352	26,562
Livestock purchase	do.	7,431	7,734	9,262
Other livestock expense	do.	3,140	4,140	1,750
Crop expense	do.	339	418	438
Machinery purchase	do.	0	0	0
Other machinery expense	do.	1,542	1,709	1,764
Ranch buildings and fences	do.	2,557	2,861	2,950
Labor hired	do.	1,866	2,028	2,065
Taxes	do.	3,587	4,821	4,666
Other	do.	1,805	2,062	2,097
Other	do.	1,392	1,579	1,570
Return to operator labor and management, and capital ⁴	do.	9,439	12,174	10,030
Interest paid	do.	---	---	7,644
Return to operator labor and management and equity capital	do.	---	---	2,386

Ranch production and price indexes (1965-67=100)

Net ranch production	---	100	91	84
Range condition	---	100	97	96
Prices received for products sold	---	100	128	130
Prices paid, including wages to hired labor	---	100	112	115

¹Preliminary. ²Land rented is grazing land. Some of it is rented on an animal unit month basis and some on an acre basis. These charges are included in expenditures for feed and grazing fees. Thus the value of this land rented is not included in ranch capital, and no real estate tax or related cost is in-

cluded in ranch expenditures. ³Does not include estimated value of grazing permits or rented land. ⁴The information presented here assumes ranches are debt-free and producers are full owners, primarily for comparability between types of farms.

mainly responsible for an 8-percent yearly increase in labor costs. By reducing the amount of labor hired in 1970, however, ranchers reduced this cost 3 percent below the 1969 amount. This was accomplished despite a 3-percent increase in wage rates.

Although southwestern ranches do not have crop enterprises, substantial outlays are made each year for operation of pickup trucks, trucks, automobiles, tractors, and other equipment. The 1970 machinery expense of \$4,714 for repair, replacement, and operating costs was slightly higher than in 1969. Purchases of new equipment were deferred in 1969 and 1970 because of uncertainty about drought.

Real estate and personal property taxes are a large expense. The tax bill in 1970 increased 16 percent from the 1965-67 period and 2 percent from 1969.

Other expenses included the ranch shares (less personal expenses of the ranch family) of telephone service, electricity, business insurance, and other

miscellaneous costs. Changes in these expenses usually parallel changes in the cost of living. On a general program of expense reduction, ranchers slightly reduced these expenses in 1970.

In 1970, ranchers reduced total operating expenses 3 percent from those in 1969, despite higher prices paid. They accomplished this reduction despite higher feed costs, by deferring purchases which could be delayed.

Some of the causes for major income changes are shown by the index numbers of production and prices (table 1). Net production in 1970 was considerably less than in 1969 or the 1965-67 base period, partly because of continued deterioration of range conditions. One of the most notable features of 1970 was the very favorable level of prices received. Although prices received advanced 2 index points from 1969 to 1970, lower production rates and higher costs more than offset the favorable livestock market prices.



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