U. S. DEPARTMENT OF AGRICULTURE • ECONOMIC RESEARCH SERVICE • APRIL 1971 • FCR-79

COSTS and RETURNS

MIGRATORY SHEEP RANCHES

Utah - Nevada

1970

ABSTRACT

Net returns in 1970 were slightly below those obtained a year earlier by operators of 2-band migratory sheep ranches in Utah and Nevada, the top sheep and wool producing areas of its kind in the United States. Lower prices received for sheep and lambs, and lower returns from wool including wool incentive payments, were responsible. U.S. sheep and wool production continue to decline.

Key Words: Ranch returns, lamb prices, wool incentive payments, cash farm costs, and improved production.

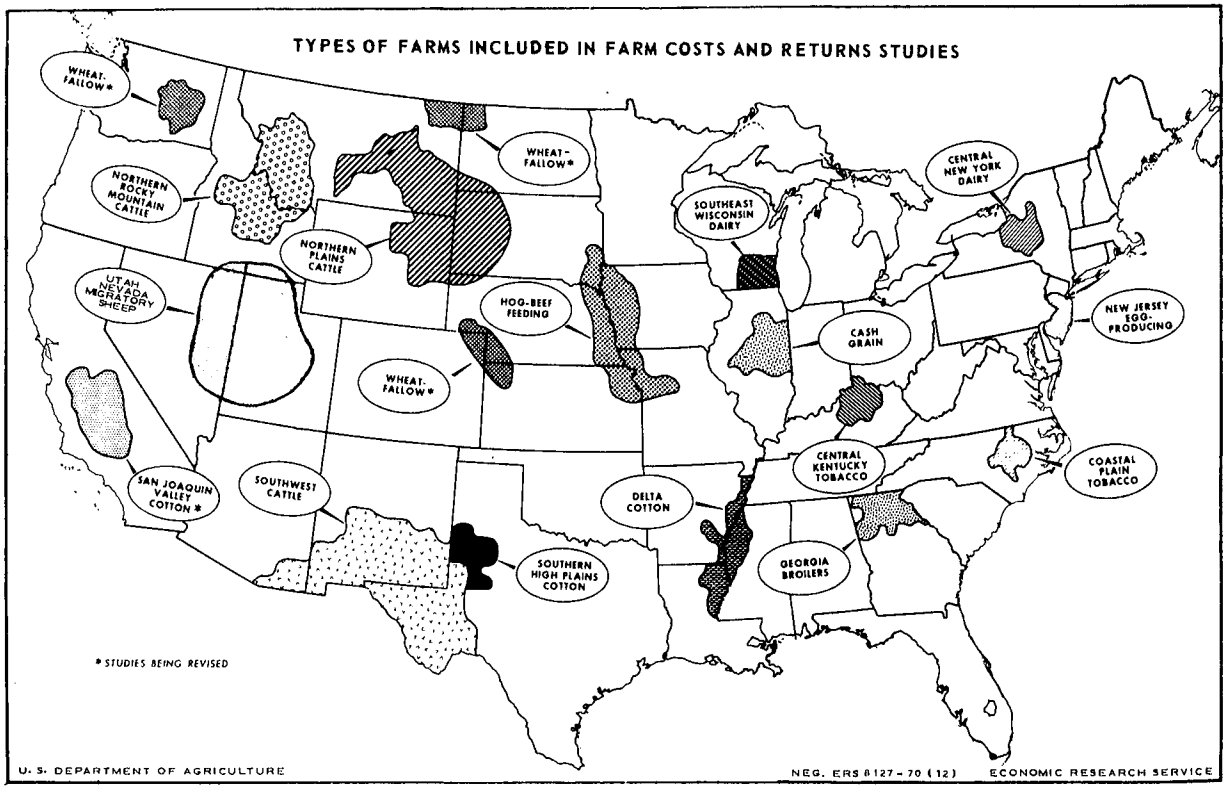
FARM COSTS AND RETURNS STUDIES

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. Information for 1969 and earlier years for migratory-sheep operations, Utah-Nevada is available in "Costs and Returns, Migratory Sheep Operations, Utah-Nevada 1960-69", AER 195.

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
Egg-Producing Farms, New Jersey
Cotton Farms, Missippi 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 MIGRATORY-SHEEP OPERATIONS, UTAH-NEVADA, 1970

BY WYLIE D. GOODSELL AND MACIE BELFIELD[1]

INTRODUCTION

Sheep are produced on about 1 in 14 U.S. farms. In the 11 Western States nearly 1 in 6 produces sheep, and in the study area, western Utah and east-central Nevada, the major migratory-sheep producing area in the United States, nearly 1 farm in 4 produces sheep (fig. 1).

Sheep-producing units may be classed into farm flocks, stock or sheep farms, and sheep ranches. Farm flocks generally average less than 40 sheep per unit, although some flocks are as large as 300–500 head. Farm flocks make up nearly 95 percent of all U.S. producing units, but produce less than a third of the sheep. These flocks are the chief source of most purebred sheep and of breeding rams for ranchers.

Stock or sheep farms generally average around 500 head per unit. Few exceed 1,000 head. These farms, common in the Plains States and around the slopes of the Cascade mountains, produce about one-fifth of U.S. sheep. As with farm flocks, these sheep are operated under fence.

Sheep ranches vary greatly in size, ranging from around 1,500 head to several thousand head per ranch. They produce more than half of the sheep and wool in the United States. In the study area, sheep ranches produce three-fifths to three-fourths of the sheep and wool. This region, though relatively small in terms of land area, produces slightly more than one-sixth of the lambs and wool in the Intermountain States of Utah, Nevada, Idaho, Montana, Wyoming, and Colorado.

The typical viable sheep ranch in the study area has around 2,400 head of stock sheep. Herd size changes little from year to year, limited by the number of sheep one shepherd can herd well, and by

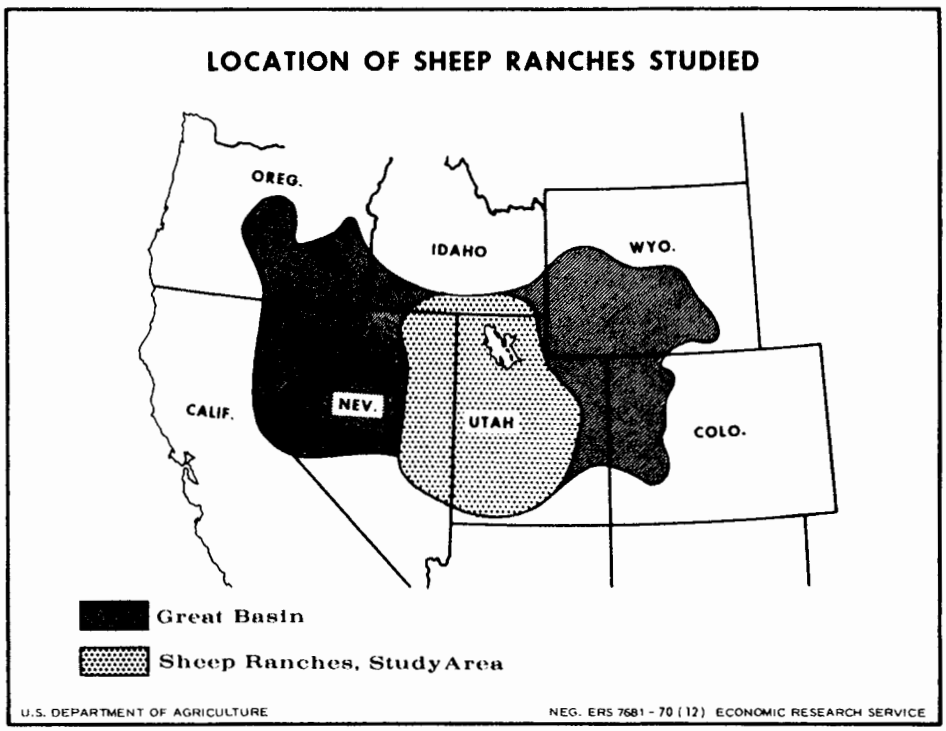


Figure 1

[1]Agricultural Economist and Statistical Assistant, respectively, Farm Prod. Econ. Div., Econ. Res. Serv., U.S. Dept. Agr.

other operating restrictions.

Sheep ranch operators generally are efficient farmers with long experience in the business. Most of them grew up with a family sheep operation. There average age is around 55 years.

The ranches are owner-operated. When a rancher obtains permits to graze public lands he must give satisfactory evidence that he owns both land and livestock, and that he has sufficient land to maintain his livestock when they are not on public land. Sheep graze under permit up to 8 months a year.

Because the sheep graze mostly public land, and because of high herder costs and related high overhead costs, operators attempt to maintain a uniform optimum herd size. Under year-round control of a herder, the sheep migrate seasonally from range to range. After lambing on the spring-fall range, sheep are moved to the high summer range. Most of the lambs are marketed at the end of summer.

The remaining herd then goes to the spring-fall range at lower elevations and to farms in the valleys where they glean harvested fields. As the fall season ends, the next year's breeding ewes are selected and moved to the winter range. Culled ewes and lambs too light to market at the end of summer are sold.

Bucks are moved from the ranch headquarters, where they receive special care, to the winter range in late November and early December for the breeding season. Around April, sheep are moved to shearing pens and then to the spring-fall range were lambing takes place.

A growing number of herds are sheared by portable shearing crews. The most modern units shear 2,000 to 3,000 sheep per day. Some shearing also takes place on the winter desert range.

Lambing on these ranches generally occurs after shearing in late April and early May, relatively later than in most other of the United States. Supplements are fed during lambing, as well as when there is heavy snow or when winter range is too poor to sustain animals. Lambs are marketed mostly in September and October, directly from the range. They are relatively lightweight animals and only a small percentage of them grade "fat".

Sheep usually are trucked from area to area. In former days, they were trailed or driven. Where trail lanes are available, many herds are still trailed to the closer ranges. Trailing is most common from spring-fall to summer range. After forage on the high summer ranges is gone, many herds are trailed back to spring-fall ranges and harvested fields.

COSTS AND RETURNS

Net ranch income averaged $19,900 per ranch in 1970, about 8 percent below 1969, but almost 2 1/2 times the 1960-64 average.

Net ranch production rose to a record level in 1970. Market weight of lambs marketed per ranch, wool clip, and crop production hit new peaks, boosting net ranch production a fifth over the 1960-64 average.

Offsetting this favorable output picture, lamb and wool prices declined and operating costs increased, particularly for labor and machinery operation.

The index of prices paid for items used in production increased about 3 percent. Total ranch operating expense also increased in 1970 by 3 percent—to total $34,071 (table 1). This excludes interest paid on borrowed capital, charges for owned capital, and returns for operator's labor and management.

Cash receipts in 1970 at $52,300 were down a little more than 3 percent from a year earlier, due primarily to lower lamb and wool prices.

Ranch Production

Lamb marketings from migratory sheep ranches were record high in 1970. Winter storms helped, while spring storms hindered, the lamb crop. Ranchers depend greatly on good weather for range feed, the basic input. Light snow storms make some kinds of range forage more palatable and provide water for sheep, thus reducing feed costs and expense of hauling water. But a heavy snow storm can maroon sheep, force expensive feeding, and increase death losses. Therefore, the very storms which aid the production of essential range forage can, if ill timed and severe, play havoc with new lambs, and even mature sheep.

These dual effects were felt in 1970. There were no extensive heavy snow storms in the 1969-70 winter and no reported heavy losses of sheep. The snowfall was adequate to produce good forage, and therefore fewer supplements were fed. Water hauling was above normal, however.

In the spring of 1970, the number of lambs marked and docked per 100 breeding ewes was the highest in more than a decade. But cold storms shortly after docking killed many young lambs, producing the highest death loss on record. Even with this setback, the number of lambs sold per ranch and marketing weights topped all records.

A record wool crop was produced in 1970. The number of sheep shorn was only slightly below the record number shorn in 1969, but the wool clip per animal was a record high.

The early storms provided adequate irrigation water and aided in producing record hay yields and near

Table 1.–Costs and returns, migratory sheep operations, Utah-Nevada, 1969 and 1970

Item	Unit	Average 1960-64	1969	1970[1]
Total land operated[2]	Acre	12,300	12,300	12,300
Land owned	do.	7,180	7,180	7,180
Livestock on ranch:				
Total stock sheep	Number	2,358	2,455	2,430
Ewes 1 year and older	do.	1,966	2,025	2,025
Ewe lambs	do.	327	364	339
Lamb crop	Percent	88	92	95
Fleece weight	Pound	10.5	10.4	10.7
Total ranch capital, Jan. 1[3]	Dollar	178,160	214,130	230,370
Land and buildings	do.	119,270	129,560	133,290
Livestock	do.	47,070	69,580	81,070
Machinery and equipment	do.	11,020	13,950	14,680
Crops	do.	800	1,040	1,330
Total cash receipts	do.	33,927	54,097	52,305
Sheep	do.	876	2,301	2,102
Lambs	do.	17,500	31,859	30,549
Wool	do.	10,799	10,738	8,897
Wool payments	do.	3,766	7,802	9,306
Crops and miscellaneous	do.	986	1,397	1,451
Value of perquisites	do.	733	992	971
Inventory change:				
Livestock	do.	369	-720	631
Crops	do.	25	194	30
Gross ranch income	do.	35,054	54,563	53,937
Total operating expense	do.	27,068	33,073	34,071
Grazing costs	do.	2,187	3,144	3,070
Other feed	do.	2,781	2,320	2,237
Livestock purchases and miscellaneous expense	do.	1,361	2,052	2,129
Shearing and clipping	do.	1,948	2,372	2,443
Contract trucking	do.	2,490	3,180	3,258
Machinery purchased	do.	1,678	2,119	2,251
Machinery operating cost	do.	1,696	2,090	2,256
Ranch buildings and fences	do.	397	455	495
Labor hired	do.	9,056	10,980	11,506
Taxes	do.	2,667	3,409	3,436
Other	do.	807	952	990
Net ranch income	do.	7,986	21,490	19,866
Interest paid on mortgage	do.	---	---	4,326
Return to operator labor and capital	do.	---	---	15,540
Charge for operator's capital	do.	---	---	12,638
Operator labor return	do.	---	---	2,902

[1] Preliminary. [2] Land rented is grazing land. Charges for use of it are included in expenditures for feed and grazing fees. The value of the rented land is not included in ranch capital, and no real estate tax or related costs are included in ranch expenditures. [3] Excludes estimated value of grazing permits.

record grain yields. Grain production, although relatively unimportant on these ranches, was record high. Despite heavier than usual hay feeding in early spring, hay purchases in 1970 were nearly 10 percent below a year earlier.

Cash Receipts

Lamb prices received in 1970, at $25.65 per hundredweight, averaged $1.65 below a year earlier, but were second highest in more than a decade.

Cash receipts in 1970 from sales of sheep and lambs were down 4-5 percent from a year earlier, by about $1,520 per ranch, due to lower prices received. Because of record market weights, volume marketed was up slightly, despite a few more lambs held back for breeding purposes.

Growers, wool prices averaged about 35 cents per pound, about 8 cents below a year earlier and the lowest in over a decade.

In most years wool buyers are active around the shearing pens and corrals. In 1970, wool was stacked up at most shearing corrals and fewer buyers than usual were present. Many ranchers held their wool until late in the season hoping for a better price, only to be disappointed as prices declined throughout the year. December prices were 14 cents per pound lower than in the previous January.

Wool incentive payments per ranch in 1970 were record high, up substantially from a year earlier. Total wool receipts were down less than 2 percent from 1969, and up about one-fourth from the 1960-64 average.

Income from wool in 1969 and 1970 amounted to about one-third of gross ranch income, versus nearly 42 percent in 1960-64.

Lamb prices have generally improved relative to wool prices during the past decade. The average wool clip has increased slowly, because of improved breeding programs. Marketing weights of lambs have increased substantially as a result of improved grazing and also because of better selection of breeding stock.

Ranch Costs

Outlays in 1970 for feed purchases and grazing fees totaled about 3 percent less than in 1969. Grazing fee rates charged by Federal and State agencies were supposed to increase in 1970 under the schedule set forth January 14, 1969, by regulation of the Secretary of Agriculture and the Secretary of the Interior. However, a moratorium was declared, and fees in 1970 were unchanged from 1969. Rates charged for grazing private land increased slightly in 1970.

All other major expenditures edged up in 1970. Quantities of purchased inputs decreased slightly but prices and rates paid for nearly all inputs advanced. Machinery purchases and operating costs each rose about 7 percent. Outlays for herders and other hired labor increased by nearly a third of total operating expenditures.

Total operating expenses in 1970 were a fourth higher than in 1960-64. Prices paid in 1970 also averaged a fourth higher than in 1960-64 (table 2). Thus, substantially all of the increase in operating expense was due to increased prices and cost rates paid.

Table 2.—Production, costs, and prices, migratory sheep operations, Utah-Nevada, 1969 and 1970

Index numbers 1960-64=100

Item	Average 1960-64	1969	1970[1]
Net farm production	100	116	121
Range condition	100	108	102
Production per unit of input	100	112	117
Operating expense per unit of production	100	108	108
Total cost per unit of production	100	109	112
Prices received for products sold	100	140	133
Prices paid, including wages to hired labor	100	122	126

[1] Preliminary.

Ranch Capital

Total capital per ranch increased for the fourth consecutive year in 1969 and was a record high of $230,370 on January 1, 1970. This was nearly 8 percent above a year earlier. Most of the increase came in livestock, but per-acre values of land also increased. Total investment per ranch in 1970 was up a third from a decade ago.

Most operators have been in the ranching business for more than a decade and have accrued considerable appreciation in ranch investment.

There was an appreciation of $16,240 in the current market value of assets from January 1, 1969, to January 1, 1970. About $11,500 of this was in sheep. The average value per head of breeding ewes was about $4.70 higher January 1, 1970, than a year earlier and that of replacement lambs was up $4.00

per head. Almost the reverse of this occurred in 1970, as prices of sheep and lambs declined.

A January 1969 survey indicated that most of the operators carried some debt. There was considerable variation in the amount owed but the common pattern was about $60,000 per rancher. About half of this was on real estate and half on sheep and equipment. Thus debt on real estate amounted to approximately 23 percent of estimated value of real estate and debt on other assets amounted to about 31 percent of their estimated current value.

Assuming these same ratios of debt to value prevailed on January 1, 1970, and applying average interest rates charged in 1970 by all lenders on such assets, interest charges on borrowed capital amounted to $4,326 per ranch (table 1). The return to operator labor, management and capital was $15,540. After a charge for operator's capital, at prevailing interest rates, the return to operator's labor and management was about $2,902.

Through the years these ranchers have demonstrated an ability to operate effectively. Production efficiency, measured by the index of production per unit of input, has increased year after year. In 1970, production per unit of input was 17 percent above 1960-64. The index was 112 in 1968, 105 in 1965 and 102 in 1963 (1960-64=100).

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