

MODOC BEEF MANAGEMENT STUDY 1950



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MODOC BEEF MANAGEMENT STUDY - 1950

This report covers the operations of 4 beef herds in Modoc County for the period March 1, 1950 to February 28, 1951. This is a very small sample of the beef industry in the county but contains different sized operations and the ranches are scattered about the county. The results should give a good representation of the beef industry of this area.

This study was conducted for five years from 1935-39 and is under way for the coming year.

This study covers only the beef enterprise of the ranches involved. Other operations on the ranches include hay, pasture, and in some cases grain production. The feed from these other enterprises, which was used by the beef herd, was charged to the beef at market value as of harvest time. The labor and other expenses shown in this study are those involved in actually caring for the beef herd.

BEEF PRODUCTION IN MODOC COUNTY

Beef production in Modoc County consists largely of breeding herds producing calves for sale either as weaners or yearlings, although some steers are held over and sold as two-year olds. Except for hay and concentrates necessary during the winter months, most of the feed comes from various types of range.

The normal feed cycle is Taylor grazing or private range April-May; National Forest June-September; ranch range and aftermath pasture October-December; hay and cottonseed cake January-March. Some grain may be fed during the winter and cattle may be fed in the feed lot for a short time before being sold.

Very few fat cattle are sold, most of the sales being of feeder cattle.

The success of beef production in this area depends to a large extent

on the best use of the cheapest feed available.

OUTLOOK

With ceiling prices on beef, future trends are dependent on government decisions rather than on economic forces. Production for 1951 is expected to be slightly larger than last year, since 4% more cattle were reported on feed in the Corn Belt on April 1 than in 1950.

Continued defense spending and higher consumer purchasing power will tend to force prices upward and the price received for feeder cattle will largely be determined by the ceiling price.

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TABLE 1. Production Factors and Summary of Income and Expense.

	Serial Numbers				Av.
	8	11	6	5	
Number Breeding Cows	214	55	386	292	237
Average Animal Units	287	89	743	565	421
Animal Units per Cow	1.3	1.6	1.9	1.9	1.8
Pounds Produced per A.U.	244	311	281	252	267
Pounds sold per A.U.	347	214	381	260	326
Percent Calf Crop	69	87	69	82	74
Percent Mortality	4.3	2.5	3.1	2.8	3.2
Average Value per Cwt. Produced	26.88	25.37	21.43	20.32	22.17
Net Cost per Cwt.	20.44	20.75	19.45	25.14	21.49
Management Income per Cwt.	6.44	4.62	1.98	-4.82	.68
Income per Animal Unit					
Stock Sales	89.08	53.47	78.31	55.72	71.26
Miscellaneous	1.70	--		1.14	.67
Change Stock Inventory	6.34	34.34	-13.81	-1.10	-3.56
Total Income	97.12	87.81	64.50	55.76	68.37
Cash and Depreciation Costs per A.U.					
Feed	30.39	26.15	33.07	41.53	35.08
Stock Purchased	29.83	8.98	4.30	3.32	8.57
Hired Labor	1.66	--	2.93	2.06	2.27
Horse	1.04	1.68	.94	1.06	1.04
Auto, Truck, and Tractor	.59	1.43	.14	1.93	.89
Miscellaneous	3.44	2.27	3.09	2.21	2.81
Depreciation	.09	7.55	.81	--	.77
Total	67.04	48.06	45.28	52.11	51.43
Farm Income per A.U.	30.08	39.75	19.22	3.65	16.93
Family Labor	4.63	10.82	3.90	6.27	5.18
Interest	9.73	14.58	9.76	9.56	9.94
Management Income per A.U.	15.72	14.35	5.56	-12.18	1.81
Labor Income per Hour Family Labor	4.40	2.33	2.44	--	1.35
Percent Return on Investment	13.1	9.9	7.9	--	5.9

51.43
15.12
66.55

15.12

Number of Breeding Cows - the number on hand at the beginning of the record year plus heifers calving during the year.

Animal Unit - One mature beef animal or the equivalent in feed consumption.

Animal Unit values used in this study were:

- Bulls, Cows and 2 year olds - 1.0
- Calves and Weaners - .5
- Yearlings - .75

Animal Units are used as a basis of comparison because herds vary in composition by age of animal. Some sell calves and others sell 2 year olds. Comparison on a per cow basis would not give an accurate picture for comparing these operations.

MANAGEMENT INCOME is the total income minus the total expense. It is the return to the rancher for his management of the beef herd.

TABLE 2 - Analysis of Stock Sales and Investment

	Serial Numbers					#
	8	11	6	5	Av.	
Sales per Animal Unit						
Bulls	6.97	3.33	--	.53	1.54	5
Cows	30.45	5.66	16.13	10.03	15.97	82
Calves	27.59	--	4.49	1.98	7.35	30
Heifers	--	1.42	13.63	5.16	7.82	38
Steers 1-2	19.59	36.91	44.06	24.30	32.89	149
Steers 2-3	--	6.15	--	13.72	4.93	22
Misc.	4.48	--	--	--	.76	
Total	89.08	53.47	78.31	55.72	71.26	326
Average Price per Cwt. Sold						
Bulls	36.36	21.50	--	21.40	31.35	
Cows	23.50	20.00	21.20	13.40	19.43	
Calves	23.95	--	26.20	23.00	24.46	
Heifers	--	22.00	20.15	23.60	20.84	
Steers 1-2	23.85	26.20	20.00	26.80	22.02	
Steers 2-3	--	26.20	--	22.50	22.71	
Average	25.64	24.95	20.55	21.47	21.88	
Average Weight per Animal Sold						
Bulls	1100	1380	--	1400	1183	
Cows	790	1260	1000	880	905	
Calves	370	--	327	303	351	
Heifers	--	695	660	440	602	
Steers 1-2	725	695	880	744	822	
Steers 2-3	--	--	--	984	962	
Investment per Animal Unit						
Land in lots and corrals	1.74	2.81	2.02	.89	1.63	
Buildings and Equipment	.45	80.40	7.09	--	7.46	
Feed	9.82	26.23	14.71	13.99	14.25	
Cattle	182.66	182.04	171.35	176.36	175.52	
Total	194.67	291.48	195.16	191.24	198.86	

The best selling policy for any ranch will depend on the feed supply available, the percent calf crop, and other factors. Efficient use of feed may be more profitable than selling for the highest market. With the feed available in this area, selling of long yearlings is probably the most profitable sales practice. With a high calf crop, 85% or better, weaner calves may be profitable if they can be raised to 400 pounds or better.

TABLE 3 - Analysis of Feed Use and Cost

	Serial Numbers				
	8	11	6	5	Av.
Feed Cost per Animal Unit					
Hay	22.57	12.07	25.57	22.00	23.15
Concentrate	--	2.25	.99	8.34	3.35
Pasture	7.18	10.04	5.98	10.86	8.04
Salt & Mineral	.64	1.79	.53	.33	.54
Total Feed Cost	30.39	26.15	33.07	41.53	35.08
Feed Used per Animal Unit					
Animal Unit Months Forest	3.6	4.3	1.4	.3	1.6
Animal Unit Months Taylor Grazing	--	.3	.9	.4	.6
Acres Owned or rented pasture	6.8	10.8	3.2	6.1	5.2
Acres Aftermath	2.2	2.2	.8	.6	1.1
Tons Hay	1.2	1.0	1.3	1.4	1.3
Pounds Concentrate	--	67	27	227	90
Percent of Feed by Source (Based on Total Digestible Nutrients)					
Hay	32	24	41	37	37
Concentrate	--	1	1	4	2
Pasture	68	75	58	59	61
Total	100	100	100	100	100
Cost per Animal Unit Month of Feed					
Hay	7.20	4.78	8.00	6.37	7.13
Concentrate	--	16.70	19.40	19.30	19.25
Pasture	1.08	1.24	1.33	1.92	1.49
Average	3.22	2.43	4.29	4.40	3.98
Hours Labor per Animal Unit	6.3	10.8	6.8	9.3	7.8

Hay was valued at the market price at time of harvest. The low cost of hay for No. 11 resulted from a change in the amount and value of hay on hand at the beginning and end of the year and not a lower value on the hay.

The value of owned range was figured as interest on the Investment plus taxes.

Aftermath pasture was figured at the going rental rate for the type of forage involved.

Other feed costs were the actual costs incurred.

An Animal Unit Month of Feed was figured as 400 pounds of Total Digestible Nutrients (TDN) per month.

TDN was figured at - Hay 50%, Concentrate 75% and for pasture, the animals were assumed to have obtained 400 pounds of TDN per month per animal unit.