

A. J. Reed

17 TH

LASSEN

COUNTY

BEEF MANAGEMENT
STUDY

1951

University of California
Agricultural Extension Service
U.S. Department of Agriculture
and Lassen County

Office of the
Farm Advisor
Susanville, California
December, 1952

Introduction

Cattle ranching is one of the most important business operations in Lassen County. Profitable production requires an adequate size of business, a succession of economical sources of feed, and efficient production methods. Large investments are required for an economical size of unit and, over a period or years, the return on the investment is low.

This report covers only the beef enterprise, which is just a part of the total ranch operation. Beef production is the major activity of these ranches but their operations include hay and pasture production and, in some cases, other enterprises. Much of the labor and other expenses of the ranch go into hay and pasture production but these records include only the operation of the beef herd. Farm produced feed used by the cattle is charged to the beef enterprise at the local value the same as if the feed had been purchased.

How Big a Business?

Farm income has averaged about \$20 per animal unit during the last ten years of this study. On this basis, it would require about an average of 150 animal units per year to return \$3,000 for family living and other expenses. This would require a breeding herd of about 100 cows. The results of this study over the years indicate that 100 breeding cows is about the minimum for a satisfactory family living and efficient methods of production.

A. D. Reed
Extension Economist
Farm Management

Cattle Ranching in Lassen County

Cattle ranching in Lassen County is the production of beef by grazing cattle in the grazing district (Public Domain), National Forests, and privately owned and rented land.

Rainfall is low and winters severe and necessitate the feeding of about a ton of hay per animal unit. Hay for winter feeding is produced locally in irrigated hay meadows and alfalfa fields.

Grazing on the public lands is regulated by permits granted to local ranchers on a scale commensurate with the feed-producing capacity of their ranches. The usual feed cycle is grazing district or private grazing land in the spring (April and May), National Forest in the summer (June to September), home ranches on hay aftermath October to December, and on hay during January to March. Some ranchers use no National Forest or grazing district lands and some have irrigated meadow summer pastures for part or all of their cattle, but the above cycle is typical of most of the producers.

The provision of adequate feed throughout the year by utilization in succession of most economical sources at each season is the essential to profitable cattle ranching in Lassen County.

T. S. Brown
Farm Advisor
Lassen County

Table 1. Production Factors

	7	4	Serial Numbers		8	1	Ave.
			6	9			
Number breeding cows	140	456	298	95	64	121	196
Average animal units	226	769	436	166	77	168	307
Animal units per cow	1.6	1.7	1.5	1.7	1.2	1.4	1.6
Pounds produced per A.U.	377	258	403	593	320	292	343
Pounds sold per A. U.	337	226	257	465	229	172	264
Percent calf crop	92	65	94	91	72	84	80
Percent mortality	2	4	6	3	2	1	4
Average value per cwt. produced	28.41	30.66	24.83	25.54	31.38	26.56	27.65
Net cost per cwt.	14.74	16.83	16.33	20.63	24.91	22.01	17.72
Management income per cwt.	13.67	13.83	8.50	4.91	6.47	4.55	9.93
Hours labor per A. U.	3	6	5	16	5	6	6

The high "pounds produced per animal unit" for record No. 9 resulted from an increase in inventory weights during the year.

Table 2. Income and Expense per Animal Unit.

	7	4	6	9	8	1	Ave.
Income per Animal Unit							
Stock sales	103.37	68.07	77.44	146.47	82.11	63.66	81.85
Miscellaneous	--	--	--	--	1.33	--	.06
Change stock inventory	10.13	11.07	27.74	38.91	18.23	17.31	18.27
Total	113.50	79.14	105.18	185.38	101.67	80.97	100.18
Cash and depreciation cost							
Feed	39.67	28.10	48.51	82.43	58.60	44.39	42.00
Hired labor	.63	3.90	1.50	9.30	--	1.12	3.00
Stock purchased	6.19	---	4.94	33.98	--	3.26	5.28
Miscellaneous	3.51	2.72	3.73	9.96	5.67	4.53	3.99
Depreciation	1.24	.42	1.01	2.45	2.67	1.25	1.01
Total	51.24	35.14	59.69	138.12	66.94	54.55	55.28
Farm income per A. U.	62.26	44.00	45.49	47.26	34.73	26.42	44.90
Family labor	2.17	1.95	1.50	7.12	4.69	5.61	3.31
Interest on investment	8.45	6.36	7.45	11.05	9.36	7.50	7.53
Management income per A.U.	51.64	35.69	34.32	29.09	20.68	13.31	34.06

Table 3. Analysis of Sales

	7	4	6	9	8	1	Ave.	#
Sales per animal unit								
Bulls	3.59	1.09	.85	2.81	---	2.08	1.54	5
Cows	18.49	20.05	20.75	11.84	8.31	1.82	17.13	68
Calves	7.63	---	11.50	---	73.80	59.76	12.20	33
Heifers 1-2	17.02	.69	.83	11.72	---	---	3.63	11
Steers 1-2	56.65	46.24	43.51	120.10	---	---	47.35	147
Total	103.37	68.07	77.44	146.47	82.11	63.66	81.85	
Ave. Price per cwt.								
Bulls	31.20	28.00	23.90	26.60	---	30.70	28.25	
Cows	25.00	28.75	22.75	20.50	22.05	14.90	25.30	
Calves	30.80	---	35.60	---	38.70	38.90	37.38	
Heifers 1-2	32.00	30.00	30.00	33.00	---	---	32.03	
Steers 1-2	32.60	30.35	35.30	33.20	---	---	32.31	
Ave. weight per animal sold								
Bulls	1300	1492	1550	1750	---	1140	1432	
Cows	925	825	1120	1060	965	1030	944	
Calves	179	---	335	---	473	363	390	
Heifers 1-2	570	882	600	653	---	---	613	
Steers 1-2	700	953	480	786	---	---	735	
Percent of cows sold	17	33	19	9	9	3	19	

Table 4. Analysis of Feed Costs and Investment

	7	4	6	9	8	1	Ave.
Feed cost per animal unit							
Hay	26.87	21.14	39.08	41.99	43.29	33.03	29.97
Concentrate	4.88	2.00	3.15	30.82	5.43	3.10	5.46
Pasture	7.65	4.82	5.48	7.83	9.64	8.07	6.10
Salt and minerals	.27	.14	.80	1.79	.24	.19	.47
Total	39.67	28.10	48.51	82.43	58.60	44.39	42.00
Feed used per animal unit							
Acres owned range	11.9	3.9	4.7	11.8	12.8	13.9	7.1
Acres aftermath	1.0	.8	1.5	2.2	3.5	.9	1.2
Tons hay	1.1	.9	1.6	1.9	1.7	1.4	1.3
Pounds concentrate	159	59	80	830	142	70	150
Investment per animal unit							
Land in corrals	.44	1.04	.55	1.21	2.60	.24	.86
Buildings	13.27	3.41	11.48	21.22	25.72	9.77	9.64
Equipment	1.11	1.27	1.17	2.34	2.60	1.76	1.42
Feed	3.38	7.21	5.68	16.66	12.86	19.18	8.56
Cattle	150.75	114.21	130.20	179.46	143.36	119.07	130.01
Total	168.95	127.14	149.08	220.89	187.14	150.02	150.49

Table 5. Summary Lassen Beef Management Study - 1942-51

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	Ave.
Number records	9	7	6	6	7	9	9	8	8	6	8
Ave. no. cows	233	283	288	280	237	190	183	216	188	196	229
Animal units per cow	1.9	1.9	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.6	1.6
Percent calf crop	86	85	86	83	81	85	85	81	88	80	84
Percent mortality	1.4	1.9	2.1	1.1	1.5	1.4	2.4	2.8	2.3	4	2.1
Pounds produced per A.U.	305	313	316	307	306	339	375	288	340	343	323
Pounds sold per A. U.	295	276	361	367	301	365	309	361	406	264	331
Value per cwt. produced	10.26	10.46	11.48	12.75	13.72	19.47	22.00	19.51	25.78	27.65	18.61
Net cost per cwt.	7.14	6.77	6.80	9.27	11.99	15.25	15.48	18.24	14.97	17.72	13.50
Management income	3.12	3.69	4.68	3.48	1.73	4.25	6.52	1.27	10.81	9.93	5.11
Tons hay per A. U.	1.0	1.0	.8	1.0	1.0	1.3	1.6	1.1	1.1	1.3	1.1
Concentrates per A. U.	64	30	30	37	62	96	82	149	109	150	81
Hours labor per A. U.	7.4	5.8	4.8	4.5	4.6	7.3	7.3	6.7	6.6	6	6.1
Cost per ton hay	9.68	10.10	11.14	13.42	16.40	18.90	19.31	20.00	20.65	23.91	16.35
Cost per cwt. concentrates	1.73	2.41	2.80	3.00	3.09	4.07	3.08	3.31	3.86	3.65	3.10
Income per animal unit											
Stock sales	30.76	31.86	41.26	45.04	41.97	68.55	68.45	65.82	97.50	81.85	57.31
Miscellaneous	.02	.01	.04	.01	---	.17	.05	.06	.07	.06	.04
Change stock inventory	2.24	2.81	-3.18	-2.02	1.25	.12	16.67	-5.86	-2.42	18.27	2.79
Total income	33.02	34.68	38.12	43.03	43.22	68.84	85.17	60.02	95.15	100.18	60.14
Cash and depreciation costs per A. U.											
Feed	14.52	14.26	14.02	19.30	24.98	35.00	40.81	35.76	33.58	42.00	27.42
Hired labor	1.28	1.13	1.02	1.89	1.50	2.13	2.45	1.96	2.13	3.00	1.85
Stock bought	1.72	1.96	1.78	3.83	1.24	2.59	2.54	3.80	7.52	5.28	3.23
Miscellaneous	1.23	1.25	1.41	2.14	2.44	3.46	3.33	3.66	3.64	3.99	2.65
Depreciation	.41	.38	.46	.58	.77	.99	1.02	.99	1.08	1.01	.77
Total	19.16	18.98	18.69	27.74	30.93	44.17	50.15	46.17	47.95	55.28	35.92
Farm income	13.86	15.70	19.43	15.29	12.29	24.67	34.92	13.90	47.20	44.90	24.22
Family labor	1.56	1.37	1.75	1.48	2.08	3.21	2.89	2.77	2.60	3.31	2.30
Interest	2.79	2.80	2.90	3.10	4.92	7.13	7.55	7.49	7.89	7.53	5.41
Management income	9.51	11.53	14.78	10.71	5.29	14.33	24.48	3.64	36.71	34.06	16.51