

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Cattle Number, Beef Prices, and Receipts From Sales in California, 1950-1973	2
Cattle and Calves, Beef Cows, and Cattle on Feed by counties . . .	3
Costs and Returns.	4
Summary of Cow-Calf Studies in California, 1970-1973	6
Studies by Counties:	
San Benito - 1970	7
Amador - 1971	8
Fresno - 1971	9
Merced - 1971	10
Stanislaus, Eastside - 1971	11
Modoc - 1972.	12==
San Luis Obispo - 1972.	13=
Placer-Nevada - 1973.	14
Tulare - 1973	15
Summary of Stocker Studies in California, 1970-1973.	16
Studies by Counties:	
San Benito - 1970	17
Fresno - 1971	18
Sutter-Yuba - 1972.	19
Placer-Nevada, Irrigated Pasture - 1973	20
Riverside, Veal - 1972.	21

Compiled by:

A. D. Reed, Extension Economist
and
L. A. Horel, Research Associate

Co-operative Extension work in Agriculture and Home Economics, Division of Agricultural Sciences, University of California, and United States Department of Agriculture co-operating. Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914. George B. Alcorn, Director, California Agricultural Extension Service.

The University of California's Agricultural Extension Programs are available to all, without regard to race, color, or national origin.

AN ANALYSIS OF BEEF COSTS AND RETURNS IN CALIFORNIA

California cattlemen are finding it difficult to operate profitable ranches even at 1973 cattle prices. Competitive uses for land resulting from the growth in population have increased land values beyond the paying capacity of beef production and the resulting increases in taxes, labor, and other costs are causing a reappraisal of the beef industry. Attempts to increase the efficiency of production through larger calf crops, lower mortality, higher weaning weights, and more rapid gains have partially solved the problems; but costs of feed and other items have been increasing faster than the efficiencies can reduce them.

Current high prices on rangeland are one of the major problems facing cattlemen. Available cost studies indicate that operators paying for range at current rental rates may break even on their cattle operation, but the rental rate leaves little or no return on the investment in rangeland. When an interest charge for the use of owned range is charged against the beef operation, there is usually a loss for the enterprise.

Cattle and calves are the top-ranking agricultural enterprises in California based on the value of sales. Sales of cattle and calves rose to over \$940,000,000 in 1971 and accounted for about 19 percent of the agricultural income of the state. These sales include not only beef cattle but also cull dairy stock and dairy steers fattened for slaughter. On January 1, 1973, however, there were 2.9 times as many beef as dairy cattle in the state. The value of production which can be attributable to the beef industry is a close contender with dairy products for the first-ranking agricultural enterprise in California.

Beef cattle are reported in all counties of the state except San Francisco. The mountain and northeast counties are usually associated with beef production, but the major concentration of number is in the San Joaquin Valley counties which extend up into the Sierra Nevada foothills and mountains. The feedlots in the Imperial and Palo Verde Valleys result in large concentrations of cattle in those areas.

CATTLE NUMBERS, BEEF PRICES, AND RECEIPTS FROM SALES
CALIFORNIA, 1950-1973

Year	Number on farms January 1 (thousand head)								Price-cwt.		Cash receipts from cattle and calves thousands
	All cattle and calves	All beef cattle	Beef cows	Beef heifers	Beef calves	Steers	Bulls	In feedlots Jan. 1	Beef cattle	Calves	
									dollars		
1950	2,709	1,359	622	176	267	298	65	196	22.60	27.20	305,755
1951	2,953	1,599	664	210	354	372	67	248	28.60	33.70	417,582
1952	3,248	1,822	658	256	355	552	73	383	25.00	28.00	353,973
1953	3,410	1,937	727	271	377	559	78	327	17.80	18.80	257,826
1954	3,512	1,997	766	249	395	583	84	350	18.20	18.40	274,914
1955	3,863	2,389	860	363	491	625	90	482	17.90	17.90	298,858
1956	3,797	2,340	827	355	470	640	87	503	16.90	17.40	326,567
1957	3,803	2,338	837	332	506	615	90	509	19.10	19.80	336,352
1958	3,633	2,166	790	301	491	544	79	405	23.80	26.60	384,715
1959	3,933	2,469	824	318	606	683	79	511	25.00	27.70	458,724
1960	4,121	2,645	853	358	630	765	81	665	22.70	24.30	512,547
1961	4,207	2,748	851	314	680	862	80	716	22.30	24.40	539,693
1962	4,238	2,795	858	273	750	881	80	782	23.90	25.60	598,499
1963	4,562	3,134	854	314	829	1,102	81	1,000	22.50	24.90	607,848
1964	4,682	3,272	927	299	860	1,150	84	946	20.40	20.80	541,831
1965	4,684	3,288	956	339	861	1,086	87	915	22.40	21.80	651,450
1966	4,826	3,444	1,004	334	877	1,149	80	952	23.90	24.80	703,607
1967	4,883	3,501	1,035	344	846	1,198	78	984	24.10	25.80	730,639
1968	4,902	3,520	995	341	899	1,209	76	902	25.20	26.60	778,571
1969	4,902	3,534	973	351	934	1,199	77	968	27.60	29.00	848,561
1970	4,861	3,543	894	207	1,089	1,279	70	1,031	27.50	32.10	835,254
1971	4,680	3,419	916	208	1,081	1,221	85	1,001	30.40	34.90	942,475
1972	4,662	3,482	906	212	1,083	1,197	84	1,017			
1973	4,710	3,494	915	211	1,079	1,209	80	1,181			

Source: California Crop and Livestock Reporting Service, California Annual Livestock Report, Sacramento.

CATTLE AND CALVES, BEEF COWS AND CATTLE ON FEED BY COUNTIES

January 1, 1973

County	All cattle and calves	Beef cows	Cattle in feedlots
Del Norte	7,000	2,900	--
Humboldt	74,600	23,700	--
Mendocino	34,800	17,100	--
Shasta	30,800	21,500	--
Siskiyou	65,400	44,600	--
Trinity	4,400	4,100	--
Lassen	54,400	38,900	--
Modoc	65,200	48,400	--
Plumas	17,100	14,000	--
Alameda	35,400	13,900	1,500
Contra Costa	82,400	21,700	27,000
Lake	10,200	3,000	--
Marin	44,300	3,700	--
Monterey	182,300	33,000	83,000
Napa	23,800	10,500	--
San Benito	47,400	18,000	--
San Francisco	--	--	--
San Luis Obispo	133,600	42,500	18,000
San Mateo	14,600	3,200	--
Santa Clara	63,900	16,300	2,500
Santa Cruz	7,600	2,500	--
Sonoma	114,000	14,500	1,000
Butte	39,500	14,000	2,000
Colusa	14,800	7,400	1,000
Glenn	46,500	10,500	1,000
Sacramento	91,700	23,500	11,000
Solano	27,800	8,900	11,000
Sutter	13,000	5,000	--
Tehama	67,400	36,700	--
Yolo	27,800	9,700	9,000
Yuba	34,200	13,200	--
Fresno	292,300	33,000	133,000
Kern	231,400	41,000	102,000
Kings	78,300	300	18,000
Madera	117,300	30,600	19,000
Merced	313,200	29,200	29,000
San Joaquin	174,600	38,300	16,000
Stanislaus	250,700	40,300	7,000
Tulare	289,300	24,600	38,000

County	All cattle and calves	Beef cows	Cattle in feedlots
Alpine	2,200	1,800	--
Amador	12,700	9,500	--
Calaveras	22,600	11,200	--
El Dorado	14,500	8,300	--
Inyo	25,900	14,800	--
Mariposa	27,300	8,900	--
Mono	4,800	3,300	--
Nevada	6,300	3,600	--
Placer	26,000	14,000	--
Sierra	5,100	1,700	--
Tuolumne	14,300	9,200	--
Imperial	617,300	6,000	474,000
Los Angeles	91,200	1,700	22,000
Orange	21,400	4,000	--
Riverside	203,100	2,700	144,000
San Bernardino	151,300	4,600	11,000
San Diego	58,600	13,800	--
Santa Barbara	136,600	26,300	19,000
Ventura	44,800	5,400	17,000
Total State	4,710,000	915,000	1,206,000

Source: California Crop and Livestock Reporting Service, California Annual Livestock Report for 1969, Sacramento.

Costs and Returns

The following section summarizes the beef cost studies which have been made by the Farm Advisors in California during the 1970-73 period. All information has been reduced to a per cow basis or to a per animal basis in the case of stocker-feeder operations.

Where the original studies have been based on a total ranch operation, this analysis breaks the income and expenses into enterprises. The analysis for each study shows the total ranch plus enterprise accounts for range, pasture, equipment, horse, and beef. The equipment and horse expenses are charged to the other enterprises on a total cost basis so no profit or loss is shown for these two accounts. The feed produced by range and pasture is charged to the livestock enterprises at current rental rates. This results in either a profit or loss for the feed producing enterprises as well as for the livestock.

Investment figures are based on current market prices.

Incomes are based on market price at the ranch.

Expenses include all cash costs -- purchased feed, veterinary and medicine, taxes, fuel, repairs, interest on operating expense, etc., -- plus the depreciation on improvements and equipment, and interest on the investment. All labor, whether family or hired, is included as a cash cost. Management is charged at 5 percent of the net sales.

SUMMARY OF COW-CALF STUDIES IN CALIFORNIA 1970-73

	San Benito	Amador	Fresno	Merced	Stanislaus	Modoc	San Luis Obispo	Placer-Nevada	Tulare
	1970		1971				1972	1973	
PRODUCTION DATA									
Number of cows	222	100	300	100	400	200	250	100	300
Calf crop percent	85	88	90	88	90	80	85	90	85
Mortality percent	2	2	1	10	2	2	2.5	2	1
Replacement percent	20	20	15	30	16 2/3	20	20	20	20
Pounds beef per cow	522	545	538	522	516	396	512	532	527
INVESTMENT					Dollars per cow				
Range	2,700.00	1,795.00	1,493.00	920.00	2,500.00	175.00	--	1,500.00	1,875.00
Pasture				500.00	440.00	287.00	--	780.00	--
Improvements	--	330.00	40.00	15.00	15.00	93.00	--	60.00	110.00
Equipment	135.00	50.00	40.00	35.00	8.00	198.00	36.00	110.00	50.00
Horses	4.00	5.00	8.00	8.00	2.00	4.00	5.00	5.00	4.00
Cows	250.00	200.00	250.00	210.00	280.00	250.00	300.00	300.00	375.00
Other stock	67.00	77.00	69.00	72.00	50.00	90.00	80.00	73.00	100.00
Total Investment	3,156.00	2,457.00	1,900.00	1,760.00	3,295.00	1,097.00	421.00	2,828.00	2,514.00
INCOME									
Steers	70.60	69.08	76.39	82.28	81.00	54.00	81.94	112.50	117.79
Heifers	28.80	30.78	43.30	43.50	40.32	23.10	43.74	52.88	56.98
Cows	42.50	39.60	37.48	27.72	33.75	32.40	50.25	50.40	60.80
Bulls	4.15	3.25	4.89	3.20	4.05	3.64	3.48	4.80	5.18
Total Income	146.05	142.71	162.06	156.70	159.12	113.14	179.41	220.58	240.75
EXPENSE									
Range	48.60	42.50	37.25	52.00	40.00	9.25	60.00	9.10	90.00
Forest service + BLM						3.95			
Pasture	--	14.85	--	57.50	22.50	7.20	4.00	54.00	--
Hay	8.85	13.05	15.00	--	13.00	8.15	18.00	18.00	21.00
Concentrate	.55	4.95	5.97	--	--	--	7.00	--	8.05
Salt	.45	.83	.53	.50	.50	.50	1.30	1.00	--
Total Feed	58.45	76.18	58.75	110.00	76.00	29.05	90.30	82.10	119.05
Labor	29.50	38.00	38.00	38.00	38.00	24.00	40.00	31.00	37.00
Replacement bulls	6.30	7.10	8.00	5.00	6.00	5.00	6.00	5.00	3.00
Veterinary	1.00	2.48	2.00	1.00	2.00	1.00	2.50	2.00	2.00
Taxes on livestock	2.60	2.16	2.90	2.82	2.50	2.15	3.00	2.58	3.40
Horse	1.30	.50	2.78	3.27	1.71	1.15	3.08	.64	1.40
Equipment	15.45	33.79	9.00	7.48	7.51	48.16	15.34	9.35	19.20
Miscellaneous	8.75	15.00	1.18	2.50	4.00	3.50	1.10	1.10	4.35
Interest	23.40	21.05	24.23	21.71	25.04	7.74	30.48	28.85	38.85
Management	7.30	7.14	3.10	7.84	7.96	5.66	8.97	11.00	12.05
Total Expense	154.05	203.40	154.94	199.62	170.72	127.41	200.77	173.62	240.30
Net Income Per Cow	-8.00	-60.69	7.12	-42.92	-11.60	-14.27	-21.36	46.96	.45

BEEF BREEDING HERD INCOME AND COSTS

San Benito County - 1970

Based on 222 cow herd, 85% calf crop, 2% mortality, 20% replacement, selling weaners.

	Value per cow				
	Total ranch	Range	Equip-ment	Horses	Cattle
INVESTMENT					
Range land 27 acres @ \$100	2,700.00	2,700.00			
Equipment	135.00		135.00		
Horses and saddles	4.00			4.00	
Cows	250.00				250.00
Bulls .04 @ \$700	28.00				28.00
Heifers .02 @ \$195	39.00				39.00
TOTAL INVESTMENT	3,156.00	2,700.00	135.00	4.00	317.00
INCOME					
Steers .43 @ 500 lb. - 214 lb. @ 33¢	70.60				70.60
Heifers .22 @ 450 lb. - 100 lb. @ 29¢	28.80				28.80
Cows .18 @ 1,100 lb. - 193 lb. @ 22¢	42.50				42.50
Bulls .01 @ 1,700 lb. - 15 lb. @ 27¢	4.15				4.15
Transfers		48.60	15.45	1.30	
TOTAL INCOME 522 lbs.	146.05				146.05
EXPENSE					
Range 16.2 AUM @ \$ 3.00					48.60
Hay .27 ton @ \$35.00	9.45			.60	8.85
Concentrate .07 ton @ \$80.00	.55				.55
Salt	.45				.45
Total feed	10.45				58.45
Labor	29.50				29.50
Bull replacement	6.30				6.30
Veterinary and medicine	1.00				1.00
Taxes	20.75	17.60	.55		2.60
Horse					1.30
Equipment					15.45
Miscellaneous overhead	14.75	1.00	5.00		8.75
Interest on operating capital	2.00	.60	.20		1.20
Cash Cost	84.75	19.20	5.75	.60	124.55
Depreciation	14.40	9.00	5.00	.40	
Interest 7%	216.20	189.00	4.70	.30	22.20
Management 5% of \$146.05	7.30				7.30
TOTAL EXPENSE	322.65	217.20	15.45	1.30	154.05
NET INCOME	-176.60	-168.60	-0-	-0-	-8.00

Adapted from: Lydon, Rocky and Philip S. Parsons, Beef Cattle Management and Costs, University of California Agricultural Extension Mimeo, San Benito County, December 1970.

BEEF BREEDING HERD INCOME AND COSTS

Amador County - 1971

Based on 100 cow herd, 88% calf crop, 2% mortality, 20% replacement, selling weaners.

	Value per cow				
	Total ranch	Winter range	Equip-ment	Horses	Cattle
INVESTMENT					
Winter range 8.5 acres @ \$250	1,795.00	1,795.00			
Fences, corrals, etc.	330.00	330.00			
Equipment	50.00		50.00		
Horses and saddles .02 @ \$250	5.00			5.00	
Cows 1 @ \$200	200.00				200.00
Bulls .04 @ \$430	17.00				17.00
Heifers 2 yr, .2 @ \$175; 1 yr, .2 @ \$125	60.00				60.00
TOTAL INVESTMENT	2,457.00	2,125.00	50.00	5.00	277.00
INCOME					
Steers .44 @ 500 lb. - 220 lb. @ 31.4¢	69.08				69.08
Heifers .24 @ 475 lb. - 114 lb. @ 27 ¢	30.78				30.78
Cows .18 @ 1,100 lb. - 198 lb. @ 20 ¢	39.60				39.60
Bulls .01 @ 1,300 lb. - 13 lb. @ 25 ¢	3.25				3.25
Transfers		42.50	43.79	.50	
TOTAL INCOME 545 lbs.	142.71				142.71
EXPENSE					
Range 8.5 acres @ \$5					42.50
Pasture ^{1/}	14.85				14.85
Hay	13.20			.15	13.05
Concentrate	4.95				4.95
Salt	.83				.83
Total feed	33.83			.15	76.18
Labor	40.00	2.00			38.00
Bull replacement	7.10				7.10
Veterinary and medicine	2.48				2.48
Taxes	21.45	12.50	6.79		2.16
Horse					.50
Equipment		10.00			33.79
Miscellaneous overhead	17.16	.66	1.50		15.00
Gas, oil, repairs, etc.	28.30		28.30		
Interest on operating capital	3.30	1.20	.45		1.65
Cash Cost	153.62	26.36	37.04	.15	176.86
Depreciation	21.45	16.45	5.00		
Interest on investment	158.70	137.20	1.75	.35	19.40
Management 5% of \$142.71	7.14				7.14
TOTAL EXPENSE	340.91	180.01	43.79	.50	203.40
NET INCOME	-198.20	-137.51	-0-	-0-	-60.69

1/ Includes .2 acres of irrigated pasture and 16 acres of mountain range.

Adapted from: Plaister, Robert E. and Philip S. Parsons, An Analysis of Beef Costs and Returns, University of California Agricultural Extension, Jackson: June 1971.

BEEF BREEDING HERD INCOME AND COSTS

Fresno County - 1971

Based on 300 cow herd, 90% calf crop, 1% mortality, 15% replacement, selling weaners.

	Value per cow				
	Total ranch	Range	Equip-ment	Horses	Cattle
INVESTMENT					
Range land 14.9 acres @ \$100	1,493.00	1,493.00			
Buildings, corrals, etc.	40.00	40.00			
Equipment	40.00		40.00		
Horses and saddles .016 @ \$500	8.00				8.00
Cows 1 @ \$250	250.00				250.00
Bulls .05 @ \$800	40.00				40.00
Heifers .17 @ \$170	29.00				29.00
TOTAL INVESTMENT	1,900.00	1,533.00	40.00		327.00
INCOME					
Steers .48 @ 458 lb. - 218 lb. @ 35¢	76.39				76.39
Heifers .28 @ 461 lb. - 130 lb. @ 31¢	40.49				40.49
Cows .14 @ 1,164 lb. - 163 lb. @ 23¢	37.48				37.48
Bulls .01 @ 1,746 lb. - 17 lb. @ 28¢	4.89				4.89
Other yearling heifers, 10# @ 29¢	2.81				2.81
Transfers		37.25	9.00	2.78	
TOTAL INCOME 538 lbs.	162.06				162.06
EXPENSE					
Range 14.9 acres @ \$2.50					37.25
Hay and grain	1.25			1.25	
Hay .50 ton @ \$30	15.00				15.00
Concentrate .09 ton @ \$70	5.97				5.97
Salt	.53				.53
Total feed	22.75			1.25	58.75
Labor	40.00	2.00			38.00
Bull replacement	8.00				8.00
Veterinary and medicine	2.00				2.00
Taxes	16.32	12.80	.55	.07	2.90
Horse					2.78
Equipment					9.00
Miscellaneous overhead	2.33	.75	.35	.05	1.18
Interest on operating capital	2.45	.30	.20		1.95
Repairs, maintenance, fertilizer, etc.	26.60	24.10	2.50		
Cash Cost	120.45	39.95	3.60	1.37	124.56
Depreciation	6.83	2.00	4.00	.83	
Interest on investment	130.18	105.92	1.40	.58	22.28
Management 5% of \$162.06	8.10				8.10
TOTAL EXPENSE	265.56	147.87	9.00	2.78	154.94
NET INCOME	-103.50	-110.62	-0-	-0-	7.12

Adapted from: Nelson, Aaron O., 1971 Sample Income and Costs--Range Cow Operation, University of California Agricultural Extension, Fresno: 1971.

BEEF BREEDING HERD INCOME AND COSTS

Merced County - 1971

Based on 100 cow herd, 88% calf crop, ^{3.0}10% mortality, ¹⁵20% replacement, selling weaners.

	Value per cow					
	Total ranch	Range	Pasture	Equip-ment	Horses	Cattle
INVESTMENT						
Winter range 8.0 acres @ \$115	920.00	920.00				
Irrigated pasture 1.15 acres @ \$500	500.00		500.00			
Buildings, corrals, etc.	15.00	15.00				
Equipment	35.00			35.00		
Horses and saddles .02 @ \$400	8.00				8.00	
Cows 1 @ \$210	210.00					210.00
Bulls .04 @ \$500	20.00					20.00
Heifers .15 - 2 yr. olds @ \$160; .15 yearlings @ \$190	52.00					52.00
TOTAL INVESTMENT	1,760.00	935.00	500.00	35.00	8.00	282.00
INCOME						
Steers .44 @ 550 lb. - 242 lb. @ 34¢	82.28					82.28
Heifers .29 @ 500 lb. - 145 lb. @ 30¢	43.50					43.50
Cows .12 @ 1000 lb. - 120 lb. @ 18¢	27.72					27.72
Bulls .01 @ 1500 lb. - 15 lb. @ 28¢	3.20					3.20
Transfers		52.00	57.50	9.48	3.27	
TOTAL INCOME 522 lbs.	156.70					156.70
EXPENSE						
Range 8 acres @ \$ 6.50						52.00
Pasture 1.15 acre @ \$50.00						57.50
Hay .07 ton @ \$25.00	1.75				1.75	
Salt	.50					.50
Total feed	2.25				1.75	110.00
Labor	53.00	2.00	13.00			38.00
Bull replacement	5.00					5.00
Veterinary and medicine	1.00					1.00
Taxes	39.36	24.00	12.50		.04	2.82
Horse						3.27
Equipment		2.00				7.48
Miscellaneous	10.50	2.25	1.75	4.00		2.50
Interest on operating capital	4.44	.70	.90	.75	.12	1.97
Irrigation water	5.75		5.75			
Cash Cost	121.30	30.95	33.90	4.75	1.91	172.04
Depreciation	8.30	2.00	2.00	3.50	.80	
Interest on investment	121.45	64.92	35.00	1.23	.56	19.74
Management 5% of \$156.70	7.84					7.84
TOTAL EXPENSE	258.89	97.87	70.90	9.48	3.27	199.62
NET INCOME	-102.19	-45.87	-13.40	-0-	-0-	-42.92

Adapted from: University of California Agricultural Extension, Cow and Calf Operation, Owner Operated, Merced: May 1971.

BEEF BREEDING HERD INCOME AND COSTS

Stanislaus County (Eastside) - 1971

Based on 400 cow herd, 90% calf crop, 2% mortality, 16 2/3% replacement, selling weaners.

	Value per cow					
	Total ranch	Range	Pasture	Equip-ment	Horses	Cattle
INVESTMENT						
Range land 10 acres @ \$250	2,500.00	2,500.00				
Pasture land 1/2 acre @ \$850	425.00		425.00			
Fences	16.00	6.00	10.00			
Buildings, corrals, etc.	9.00	9.00				
Pasture stand	6.00		6.00			
Equipment	7.00			7.00		
Horses and saddles .005 @ \$600	2.00				2.00	
Cows 1 @ \$280	280.00					280.00
Bulls .04 @ \$500	20.00					20.00
Heifers .15 @ \$200	30.00					30.00
TOTAL INVESTMENT	3,295.00	2,515.00	441.00	7.00	2.00	330.00
INCOME						
Steers .45 @ 500 lb. - 225 lb. @ 36¢	81.00					81.00
Heifers .28 @ 450 lb. - 126 lb. @ 32¢	40.32					40.32
Cows .15 @ 1,000 lb. - 150 lb. @ 22.50¢	33.75					33.75
Bulls .01 @ 1,500 lb. - 15 lb. @ 27¢	4.05					4.05
Transfers		40.00	22.50	9.51	1.71	
TOTAL INCOME 516 lbs.	159.12					159.12
EXPENSE						
Range 10 acres @ \$4						40.00
Pasture 1/2 acre @ \$45						22.50
Hay .4 ton @ \$35	14.00				1.00	13.00
Salt	.50					.50
Total feed	14.50				1.00	76.00
Labor	40.00	2.00				38.00
Bull replacement .01 @ \$600	6.00					6.00
Veterinary and medicine	2.00					2.00
Taxes	35.03	25.00	7.50		.03	2.50
Irrigated pasture fertilizer	3.75		3.75			
Horse						1.71
Equipment		2.00				7.51
Miscellaneous overhead, gas, repairs, pickup, etc.	15.00	2.50	1.50	7.00		4.00
Interest on operating capital	4.64	.90	.80	.75	.25	1.94
Irrigation water	3.50		3.50			
Cash Cost	124.42	32.40	17.05	7.75	1.28	139.66
Depreciation	5.32	2.47	1.10	1.50	.25	
Interest on investment	229.35	175.52	30.29	.26	.18	23.10
Management 5% of \$159.12	7.96					7.96
TOTAL EXPENSE	367.05	210.39	48.44	9.51	1.71	170.72
NET INCOME	-207.93	-170.39	-25.94	-0-	-0-	-11.60

Adapted from: Van Riet, William J., Beef Cattle Cost Study, University of California Agricultural Extension Mimeo, Modesto: 1971.

BEEF BREEDING HERD INCOME AND COSTS

Modoc County - 1972

Based on 200 cow herd, 80% calf crop, 2% mortality, 20% replacement, selling weaners.

	Value per cow						
	Total ranch	Range	Alfalfa Pasture	Meadow Pasture	Equip-ment	Horses	Cattle
INVESTMENT							
Range land 7 acres @ \$ 25	175.00	175.00					
Alfalfa .3 acres @ \$300	90.00		90.00				
Meadow .7 acres @ \$200	140.00			140.00			
Fences	80.00	53.00	6.00	21.00			
Buildings, corrals, etc.	40.00	40.00					
Irrigation system	30.00		9.00	21.00			
Equipment	197.50				197.50		
Horses and saddles .01 @ \$400	4.00					4.00	
Cows 1 @ \$250	250.00						250.00
Bulls .04 @ \$500	20.00						20.00
Heifers calves: .20 @ \$150; yearlings .20 @ \$200	70.00						70.00
TOTAL INVESTMENT	1,096.50	268.00	105.00	182.00	197.50	4.00	340.00
INCOME							
Steers .40 @ 375 lb. - 150 lb. @ 36¢	54.00						54.00
Heifers .20 @ 350 lb. - 70 lb. @ 33¢	23.10						23.10
Cows .18 @ 900 lb. - 162 lb. @ 20¢	32.40						32.40
Bulls .01 @ 1,400 lb. - 14 lb. @ 26¢	3.64						3.64
Transfers		9.25	7.55	8.55	50.16	1.15	
TOTAL INCOME	113.14						113.14
EXPENSE							
Forest Service & BLM	3.95						3.95
Range 2.6 AUM @ \$3.50							9.25
Aftermath pasture 2.88 AUM @ \$2.50							7.20
Hay alfalfa 1.8 ton @ \$30						.75	4.65
Meadow 1.4 ton @ \$25							3.50
Salt 3.2	.50						.50
Total feed	4.45					.75	29.05
Labor	35.75	2.00	5.75	4.00			24.00
Bull replacement	5.00						5.00
Veterinary and medicine	1.00						1.00
Taxes	17.29	10.09	3.00	2.00		.05	2.15
Power for irrigation	4.00		2.00	2.00			
Horse							1.15
Equipment		2.00					48.16
Miscellaneous overhead, insurance, gas, etc.	14.75	2.25	1.50	1.00	6.50		3.50
Interest on operating capital	2.72	.43	.32	.18	.60	.07	1.12
Repairs	19.31	4.50	.30	.20	14.31		
Cash Cost	104.27	21.27	12.87	9.38	21.41	.87	115.13
Depreciation	27.25	5.00	1.00	1.50	19.75		
Interest on investment	44.15	12.15	9.80	6.30	9.00	.28	6.62
Management 5% of \$113.14	5.66						5.66
TOTAL EXPENSE	181.33	38.42	23.67	17.18	50.16	1.15	127.41
NET INCOME	-68.19	-29.17	-16.12	-8.63	-0-	-0-	-14.27

Adapted from: Pierce, Cecil and A. Doyle Reed, Beef Cattle Production Costs in Modoc County, University of California Agricultural Extension Mimeo, Alturas: February 1972.

BEEF BREEDING HERD INCOME AND COSTS

San Luis Obispo County - 1972
Leased Land

Based on 250 cow herd, 85% calf crop, 2.5% mortality, 20% replacement, selling weaners.

	Value per cow			
	Total ranch	Equip-ment	Horses	Cattle
INVESTMENT				
Equipment	36.00	36.00		
Horses and saddles .015 @ \$400	4.80		4.80	
Cows 1 @ \$300	300.00			300.00
Bulls .04 @ \$750	30.00			30.00
Heifers .25 @ \$250	50.00			50.00
TOTAL INVESTMENT	420.80	36.00	4.80	380.00
INCOME				
Steers .39 @ 480 lb. - 186 lb. @ 44¢	81.94			81.94
Heifers .20 @ 450 lb. - 90 lb. @ 39¢	35.10			35.10
Cows .18 @ 1,000 lb. - 180 lb. @ 24¢	43.20			43.20
Bulls .008 @ 1,500 lb. - 12 lb. @ 29¢	3.48			3.48
Cull heifers .036 @ 800 lb. - 28.8 lb. @ 30¢	8.64			8.64
Vealers .06 @ 250 lb. - 15 lb. @ 47¢	7.05			7.05
Transfers		15.34	3.08	
TOTAL INCOME 511.8 lbs.	179.41			179.41
EXPENSE				
Range 12 acres @ \$5	60.00			60.00
Pasture 1.6 AUM @ \$2.50	4.00			4.00
Hay .5 ton @ \$40	20.00		2.00	18.00
Concentrate .09 ton @ \$78	7.00			7.00
Salt + minerals	1.30			1.30
Total feed	92.30		2.00	90.30
Labor	40.00			40.00
Bull replacement .008 @ \$750	6.00			6.00
Veterinary and medicine	2.50			2.50
Taxes	3.40	.40		3.00
Horse				3.08
Equipment				15.34
Miscellaneous overhead	3.20	2.10		1.10
Interest on operating capital	5.98	2.00	.10	3.88
Gas, oil, repairs, maintenance	6.00	6.00		
Cash cost	159.38	10.50	2.10	165.20
Depreciation	4.24	3.60	.64	
Interest on investment	28.18	1.24	.34	26.60
Management 5% of \$179.41	8.97			8.97
TOTAL EXPENSE	200.77	15.34	3.08	200.77
NET INCOME	-21.36	-0-	-0-	-21.36

Adapted from: Weitkamp, W. H. and A. D. Reed, Sample Costs--Beef Cattle Cow-Calf Operation Selling Weaners, University of California Agricultural Extension Mimeo, San Luis Obispo: 1972.

BEEF BREEDING HERD INCOME AND COSTS

Placer-Nevada Counties - 1973

Based on 100 cow herd, 90% calf crop, 2% mortality, 20% replacement, selling weaners.

	Value per cow					
	Total ranch	Range	Pasture	Equip-ment	Horses	Cattle
INVESTMENT						
Range land 3.0 acres @ \$500	1,500.00	1,500.00				
Pasture land 1.0 acres @ \$780	780.00		780.00			
Buildings, corrals, etc.	60.00	60.00				
Equipment	110.00			110.00		
Horses and saddles	5.00				5.00	
Cows	300.00					300.00
Bulls .04 @ \$700	28.00					28.00
Heifers .20 @ \$225	45.00					45.00
TOTAL INVESTMENT	2,828.00	1,560.00	780.00	110.00	5.00	373.00
INCOME						
Steers .45 @ 500 lb. - 225 lb. @ 50¢	112.50					
Heifers .25 @ 450 lb. - 112 lb. @ 47¢	52.88					
Cows .18 @ 1,000 lb. - 180 lb. @ 28¢	50.40					
Bulls .01 @ 1,500 lb. - 15 lb. @ 32¢	4.80					
Transfers		9.10	54.00	17.05	.64	
TOTAL INCOME 532 lbs.	220.58					220.58
EXPENSE						
Range 2.6 AUM @ \$ 3.50						9.10
Pasture 12.0 AUM @ \$ 4.50						54.00
Hay .5 ton @ \$36.00	18.00					18.00
Salt	1.00					1.00
Total feed	19.00					82.10
Labor	60.00	5.00	24.00			31.00
Bull replacement	5.00					5.00
Veterinary and medicine	2.00					2.00
Taxes	12.93	5.06	5.25		.04	2.58
Horse						.64
Equipment		1.00	6.70			9.35
Miscellaneous overhead	10.00	.50	3.40	5.00		1.10
Fertilizer	12.00		12.00			
Water	18.53	2.80	15.73			
Interest on operating capital 8.5%	5.95	.45	2.55	.20		2.75
Cash Cost	145.41	14.81	69.63	5.20	.04	136.52
Depreciation	34.70	5.56	20.74	8.00	.40	
Interest on investment 7%	191.85	107.10	54.60	3.85	.20	26.10
Management 5% of \$220.58	11.00					11.00
TOTAL EXPENSE	382.96	127.47	144.97	17.05	.64	173.62
NET INCOME	-162.38	-118.37	-90.97	-0-	-0-	46.96

Adapted from: Mason, William E. and Philip S. Parsons, Cow and Calf Operation, 100 Cows, University of California Agricultural Extension Mimeo, Auburn: May 1973.

BEEF BREEDING HERD INCOME AND COSTS

Tulare County - 1973

Based on 300 cow herd, 85% calf crop from cows, 60% calf crop from first calf heifers, 1% mortality, 20% replacement, selling weaners.

	Value per cow				
	Total ranch	Range	Equip-ment	Horses	Cattle
INVESTMENT					
Range land 25 acres @ \$75	1,875.00	1,875.00			
Fences	67.00	67.00			
Buildings, corrals, etc.	33.00	33.00			
Water and feeding facilities	10.00	10.00			
Equipment	50.00		50.00		
Horses and saddles .01	4.00			4.00	
Cows	375.00				375.00
Bulls .05 @ \$800	40.00				40.00
Heifers .2 @ \$300	60.00				60.00
TOTAL INVESTMENT	2,514.00	1,985.00	50.00	4.00	475.00
INCOME					
Steers .42 @ 450 lb. - 190 lb. @ 55¢	104.77				
.06 @ 350 lb. - 21 lb. @ 62¢	13.02				
Heifers .22 @ 420 lb. - 94 lb. @ 50¢	46.90				
.06 @ 300 lb. - 18 lb. @ 56¢	10.08				
Cows .19 @ 1,000 lb. - 190 lb. @ 32¢	60.80				
Bulls .01 @ 1,400 lb. - 14 lb. @ 37¢	5.18				
Transfers		90.00	24.20	1.40	
TOTAL INCOME 527 lbs.	240.75				240.75
EXPENSE					
Range 15.0 AUM @ \$ 6					90.00
Hay .6 ton @ \$35	21.85			.85	21.00
Concentrate .1 ton @ \$80	8.05				8.05
Total feed	29.90				119.05
Labor	40.00	3.00			37.00
Bull replacement	3.00				3.00
Veterinary and medicine	2.00				2.00
Taxes	28.90	25.00	.50		3.40
Horse					1.40
Equipment		5.00			19.20
Miscellaneous overhead	5.35	1.00			4.35
Repairs	7.00		7.00		
Gas and oil	5.35		5.35		
Interest on operating capital 8%	7.30	1.20	.50		5.60
Cash Cost	128.80	35.20	13.35	.85	195.00
Depreciation	14.30	4.95	8.95	.40	
Interest on investment	170.20	134.90	1.90	.15	33.25
Management 5% of \$240.75	12.05				12.05
TOTAL EXPENSE	325.35	175.05	24.20	1.40	240.30
NET INCOME	-84.60	-85.05	-0-	-0-	.45

Adapted from: Miller, Robert F., Tulare County, 1973 Beef Production Enterprise Cost Study, University of California Agricultural Extension Mimeo, Visalia: April 18, 1973.

SUMMARY OF STOCKER CATTLE STUDIES IN CALIFORNIA 1970-1973

	San Benito	Fresno	Sutter-Yuba	Placer-Nevada
	1970	1971	1972	1973
PRODUCTION DATA				
Number of animals bought	845	1,000	1,000	450
Mortality--percent	2	2	1	1
Pounds beef per animal	250	207	200	217
	dollars per stocker			
INVESTMENT				
Range	710.00	300.00	600.00	
Pasture	--	--	--	90.00
Improvements	--	--	--	100.00
Equipment	17.75	7.50	10.00	133.00
Horses	1.05	1.50	2.00	--
TOTAL	728.80	309.00	612.00	323.00
INCOME				
Sales	205.80	200.31	250.77	343.43
Purchases	153.00	150.96	189.00	270.00
NET SALES	52.80	49.35	61.77	73.43
EXPENSE				
Range	13.35	9.50	21.00	--
Pasture	--	--	--	18.00
Hay	2.74	.15	6.85	20.00
Concentrate	1.14	4.20	--	--
Salt	.27	.20	.25	.50
Total Feed	17.50	14.05	28.10	38.50
Labor	6.80	4.50	2.50	5.00
Veterinary and medicine	.30	.75	1.20	.50
Taxes on livestock	.65	1.06	.90	.75
Horse	.30	.62	.65	--
Equipment	4.09	2.56	1.00	5.04
Miscellaneous	2.20	.20	.50	1.00
Interest	7.00	6.06	7.56	9.56
Management	2.64	2.47	3.09	3.67
TOTAL	41.48	32.27	45.50	64.02
NET INCOME PER CALF	11.72	17.08	16.27	9.41

STOCKER CATTLE INCOME AND COSTS

San Benito County - 1970

Based on 845 head bought in November @ 450 pounds, grazed 7 months, gaining 1.2 pounds per head per day, sold in June @ 700 pounds, mortality 2%.

	Value per head bought				
	Total ranch	Range	Equipment	Horses	Cattle
INVESTMENT					
Range land 7.1 acres @ \$100	710.00	710.00			
Equipment	17.75		17.75		
Horses and saddles	-1.05			1.05	
TOTAL INVESTMENT	728.80	710.00			
INCOME					
Steers					
Sell .98 @ 700 lb. - 686 lb. @ 30¢	205.80				205.80
Purchase 1.00 @ 450 lb. - 450 lb. @ 34¢	153.00				153.00
Transfers		11.70	4.09	.30	
TOTAL INCOME 236 lbs.	52.80				52.80
EXPENSE					
Range 3.9 AUM @ \$ 3					11.70
Hay .08 ton @ \$35	2.74			.15	2.59
Concentrate .01 ton @ \$80	1.14				1.14
Salt	.27				.27
Total feed	4.15				15.70
Labor	6.80				6.80
Veterinary and medicine	.30				.30
Taxes	5.35	4.70			.65
Horse					.30
Equipment					4.09
Miscellaneous overhead	4.20		2.00		2.20
Interest on cattle @ 8½%	6.50				6.50
Interest on operating capital 7%	.75	.18	.07		.50
Cash Cost	28.05	4.88	2.07	.15	37.04
Depreciation	3.78	2.26	1.42	.10	
Interest 7%	50.35	49.70	.60	.05	
Management	2.64				2.64
TOTAL EXPENSE	84.82	56.84	4.09	.30	39.68
NET INCOME	-32.02	-45.14	-0-	-0-	13.12

Adapted from: Lydon, Rocky and Philip S. Parsons, Beef Cattle Management and Costs, University of California Agricultural Extension Mimeo, San Benito County, December 1970.

STOCKER CATTLE INCOME AND COSTS

Fresno County - 1971

Based on 1,000 head, bought in fall at 400 pounds, sold in spring at 607 pounds, mortality 2%.

	Value per head sold				
	Total ranch	Range	Equip-ment	Horses	Cattle
INVESTMENT					
Range land 1.92 acres @ \$150	288.00	288.00			
Buildings, corrals, etc.	12.00	12.00			
Equipment	7.50		7.50		
Horses and saddles .003 @ \$500	1.50			1.50	
TOTAL INVESTMENT	309.00	300.00	7.50	1.50	
INCOME					
Steers					
Sell 1.00 @ 607 lb. - 607 lb. @ 33¢	200.31				200.31
Purchase 1.02 @ 400 lb. - 408 lb. @ 37¢	150.96				150.96
Transfers		9.50	2.86	.62	
TOTAL INCOME 201 lbs.	49.35				49.35
EXPENSE					
Range 1.9 acres @ \$5					9.50
Range supplement .06 ton @ \$70	4.20				4.20
Hay .005 ton @ \$30	.15				.15
Hay and grain for horses	.23			.23	
Salt	.20				.20
Total feed	4.78			.23	14.05
Labor	5.00	.50			4.50
Range fertilization	4.20	4.20			
Veterinary and medicine	.75				.75
Taxes	3.69	2.60		.03	1.06
Horse					.62
Equipment		.30			2.56
Miscellaneous overhead	.45	.15	.10		.20
Interest on operating capital	8.06	.90	1.00	.10	6.06
Fence repair, vehicle operation & maintenance	1.13	.38	.75		
Cash Cost	28.06	9.03	1.85	.36	29.80
Depreciation	1.50	.60	.75	.15	
Interest	20.95	20.58	.26	.11	
Management 5% of \$49.35	2.47				2.47
TOTAL EXPENSE	52.98	30.21	2.86	.62	32.27
NET INCOME	-3.63	-20.71	-0-	-0-	17.08

Adapted from: Nelson, Aaron O., Sample Income and Costs - Stocker Steer Operations, (Operator-Owned Land), University of California Agricultural Extension Mimeo, Fresno: 1971.

STOCKER CATTLE INCOME AND COSTS
RANGE OPERATION

Sutter-Yuba Counties - 1972

Based on 1,000 head operation; stocking rate one steer to 4 acres. Purchasing 450 pound steers in Fall (November-December) and grazing 180 days. Gain 1.1 pounds per day; 1% mortality.

	Value per stocker bought				
	Total ranch	Range	Equip-ment	Horses	Cattle
INVESTMENT					
Range land 4 acres @ \$140	560.00	560.00			
Fences	20.00	20.00			
Buildings, corrals, etc.	20.00	20.00			
Equipment	10.00		10.00	2.00	
Horses and saddles	2.00				
TOTAL INVESTMENT	612.00	600.00	10.00	2.00	
INCOME					
Steers					
Sell .99 @ 650 lb. - 643 lb. @ 39¢	250.77				
Purchase 1.00 @ 450 lb. - 450 lb. @ 42¢	189.00				
Transfers		21.00	1.85	.65	
TOTAL INCOME 193 lbs.	61.77				61.77
EXPENSE					
Range 6 head months @ \$ 3.50					21.00
Hay ¼ ton @ \$28.00	7.00			.15	6.85
Salt	.25				.25
Total feed	7.25				28.10
Labor	5.00	2.50			2.50
Veterinary and medicine	1.20				1.20
Taxes	11.90	11.00			.90
Horse					.65
Equipment		.85			1.00
Miscellaneous overhead	.50				.50
Gas, oil, repairs	.50		.50		
Interest on cattle @ 8% in 6 months	7.56				7.56
Cash Cost	33.91	14.35	.50	.15	42.41
Depreciation	3.40	2.00	1.00	.40	
Interest on investment @ 7%	41.05	40.60	.35	.10	
Management \$61.77 @ 5%	3.09				3.09
TOTAL EXPENSE	81.45	56.95	1.85	.65	45.50
NET INCOME	-19.68	-35.95	-0-	-0-	16.27

Prepared by: Wilson, Charles B. and Doyle Reed, University of California Agricultural Extension, Yuba City.

STOCKER CATTLE ON IRRIGATED PASTURE - INCOME AND COSTS

Placer and Nevada Counties - 1973

Based on 450 head, purchased May 15 at 600 pounds and grazed for 5 months, gaining 1.5 pounds per head per day. Mortality 1%.

	Value per stocker			
	Total ranch	Pasture	Equip-ment	Cattle
INVESTMENT				
Pasture land .3 acres @ \$300	90.00	90.00		
Fences	8.00	8.00		
Buildings, corrals, etc.	5.50	5.50		
Irrigation system	86.60	86.60		
Equipment	133.00		133.00	
TOTAL INVESTMENT	323.10	190.10	133.00	
INCOME				
Steers				
Sell .99 @ 825 lb. - 817 lb. @ 42¢	343.43			
Purchase 1.00 @ 600 lb. - 600 lb. @ 45¢	270.00			
Grazing		18.00		
Hay		20.00	7.39	
TOTAL INCOME 217 lbs.	73.43			73.43
EXPENSE				
Pasture 4 AUM @ \$4.50				18.00
Hay .5 ton @ \$40				20.00
Salt	.50			.50
Total feed				38.50
Labor	12.85	7.85		5.00
Fertilizer	4.00	4.00		
Water	9.05	9.05		
Veterinary and medicine	.50			.50
Taxes	2.50	1.75		.75
Equipment		2.35		5.04
Miscellaneous overhead	2.85		1.85	1.00
Seed	1.33	1.33		
Baling	2.25	2.25		
Interest on cattle	9.56			9.56
Cash Cost	45.39	28.58	1.85	60.35
Depreciation	5.76	4.87	.89	
Interest on investment	14.45	9.80	4.65	
Management 5% of 73.43	3.67			3.67
TOTAL EXPENSE	69.27	43.25	7.39	64.02
NET INCOME	4.16	-5.25	-0-	9.41

Adapted from: Mason, W. E. and Philip S. Parsons, 450 Stocker Steers, University of California Agricultural Extension Mimeo, Auburn: 1973.

VEAL INCOME AND COSTS

Riverside County - 1972

Based on 60 head, mortality 10%.

	Value per head Cattle
INVESTMENT	
Feeder	18.75
Delivery	.63
Installation	4.17
Electrical installation	.83
Pens	13.33
Concrete	8.33
Shed	2.08
Cold water tank	1.05
Hot water heater	.83
TOTAL INVESTMENT	50.00
INCOME	
Steers	
Sell 180 lb. @ 52¢	93.60
Purchase 100 lb. @ 50¢	50.00
TOTAL INCOME	43.60
EXPENSE	
Grain 300# @ 6¢	18.00
Milk replacer 135# @ 21¢	28.35
Total feed	46.35
Labor	10.00
Veterinary and medicine	1.00
Taxes	.50
Miscellaneous overhead	2.00
Bedding	.25
Cash Cost	60.10
Depreciation	5.00
Interest	1.75
TOTAL EXPENSE	66.85
NET INCOME	-23.25

Adapted from: Addis, Donald G. and A. Doyle Reed, Raising Veal Calves, University of California Agricultural Extension Mimeo, Riverside: March 1972.