

STUDY OF COSTS
TO PRODUCE BEEF ^{cattle}

WILLOW SPRINGS AREA
AMADOR COUNTY



UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE
AMADOR COUNTY

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TO PRODUCE BEEF--WILLOW SPRINGS AREA, AMADOR COUNTY

By Robert E. Plaister and Philip S. Parsons*

The total of nine ranches were studied for this report.

Description of Area

The Willow Springs Area is located in the north west corner of Amador County, between the south fork of the Consumnes River and Dry Creek. The area extends from Highway 49 westwardly to the county line.

Mean seasonal depth of precipitation is about 22 inches. Elevations range from 700 feet to about 1000 feet above sea level. Soil series located in the area are: Auburn, Mukelumne, Las Posas, Dorado, Red Bluff-Mukelumne complex, Maxwell, Wyman, and Whiterock. The principal soils, however, are the Auburn and Dorado.

Description of Cattle Operations

Three principal methods of operations are used by the ranchers in the study. One rancher stayed year around at the home ranch and got through the dry feed season with supplemental feeding. Three of the ranchers operated during the winter months in the area under study and then took their cattle to the 2 or 3 thousand foot elevation for summer range. Five of the operators ran on the winter range and then took the herd to clover

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pastures in the Elk Grove or Oak Dale areas for irrigated pasture during the summer. Two of the operators handled registered cattle as well as some grade cattle. Most of the operators used Hereford Cattle. One is developing his own breed of Brahma Hereford type crosses, and one is a Shorthorn breeder.

Method Used in Study

In most cases the record books of the ranch were examined for the previous three years to obtain the costs. Because some ranches carry sheep and horses as well as cattle, all livestock were converted to cow units. Horses were equivalent to a mature cow and five sheep were equal to one cow. Purchased calves and feeder cattle were converted to cow units on a formula basis. All of the costs involved were converted to a per cow basis. These figures were then analyzed and any exceptionally high or exceptionally low figures were discarded and an average calculated from the remaining figures.

Gasoline Costs

The gasoline costs used in these figures represent all gasoline, oil, and grease used in the ranch operation. This included the use of trucks, tractors, sprayers, pickup, etc. In some cases the ranchers calculate their ranch costs at 75% of their total gasoline expenses for the year. The major uses of the truck were moving cattle to and from the irrigated pasture and hauling hay home.

The average gasoline cost per cow in the study was \$7.00. The lowest figures were \$3.00 and \$4.00 per cow

and the highest figures were \$15.00 per cow. These high and low figures were not used in the averages. Five of the operators were below the \$7.00 average, one operator was right on the average, and three of the operators were above the average cost.

Veterinary and Medicine Costs

These costs include all medicines, drugs, veterinarian bills, and similar items. The average used in the study was \$1.11 per cow. An extremely low figure of 10¢ per cow was thrown out of the study. The highest figure in the study was \$1.90 per cow.

Insurance

Most of the ranchers included fire insurance on the barns, liability on the ranch, insurance on their trucks and automobiles, and compensation insurance. The average cost of insurance per cow was \$2.45. A high figure of \$5.35 was removed from the study; all others were included in the average. Two ranchers were below the \$2.45 figure, all others were above it.

Repairs

The average repair costs included tools and equipment for small repairs made by the operator and repairs done on the outside by other people. The repair cost per cow averaged \$6.02. Two low costs of \$1.00 were thrown out of the study. Four of the operators were above the average and the rest were below.

Interest on Annual Working Capital

This cost varied considerably due to the method of

operation. The average was \$2.68 per cow. One high figure of \$10.00 per cow was discarded from the study. Several of the people did not borrow money for working capital.

Taxes

Taxes vary considerably in amount due to the fact that some operators own all their land and thus have higher taxes and some operators rent most of their land and have lower taxes. These taxes include property and personal taxes. The average tax per cow unit is \$6.77. This average included a low of \$2.05 per cow and a high of \$15.40 per cow. These figures also vary due to size of operation. In other words, high figures generally reflect higher personal property taxes spread over fewer number of cows.

Rent

Rents also vary considerably due to the fact that one operator had no rent and the other operators rented summer range or pasture. One operator rented all his land. In some cases some winter range was rented. The average rental charge was \$23.49 per cow. These figures include both summer pasture and winter range.

Bull Replacement Costs

Bull replacement costs average \$4.31 per cow unit. These range from a low of \$2.67 to a high of \$12.50 per cow unit. The registered cattle operator's figure is taken out of the study due to the nature of the business.

Miscellaneous Expenses

These expenses include office expense, telephone, office supplies, bookkeeping etc. The average cost per

cow for miscellaneous expenses was \$3.73 per cow unit. A low figure of 38¢ per cow and a high of \$8.50 were discarded. Three ranches did not report figures for this item.

Depreciation

This item included depreciation on equipment, fences, and buildings. Five ranches did not report figures in this study. A reasonable figure was calculated to be \$10.00 per cow unit.

Irrigated Pasture

Eighty-five acres of irrigated pasture is shown as rented. Six months of grazing is provided. This makes \$5.00 per head a month plus 50 tons hay purchased comparable to \$45.00 per acre rent. A majority of the ranches used irrigated pasture rather than mountain range for summer feed therefore we have used the irrigated pasture costs. Our studies indicate a saving of about \$30.00 per cow unit by using mountain range rather than irrigated pasture.

Labor

No costs are shown for labor because the operator and his family provided all the labor or labor was exchanged with other ranchers in the area.

Income

Cattle prices were based on the Stockton Market. Five year averages (1958-62) were used for steer calves, cows, and bulls. A three year average (1958-60) was used for heifer calves. Good and choice grades were used.

Basic Guide of Cost to Produce Beef

Size of ranch----100 cows-----85 mature cows
(15% replacements-2% mortality) 15 2-yr.-old Bred Heifers
15 1-yr.-old Heifers

Investment Required

			<u>total costs</u>
Home Winter Range	850 acres @ \$150.		\$127,500.
Cows	85 @ 200.		17,000.
Heifers 2-yr.-old bred	15 @ 175.		2,625.
Heifers 1-yr.-old bred	15 @ 125.		1,875.
Bulls	4 @ 430.		1,720.
Horses	2 @ 250.		500.
Equipment (used) Truck, Tractor, Sprayer, Pickup Truck, Squeeze, Horse Trailor			<u>5,000.</u>
	Total		\$156,220.

Production - 88% weaned calf crop

Income

Cows	13 @ 1050 lbs.=13,650 lbs. @ 17¢=	\$ 2,321.
*Steer Calves	43 @ 500 lbs.=21,500 lbs. @ 26¢=	5,590.
**Heifer Calves	28 @ 450 lbs.=12,600 lbs. @ 23¢=	2,898.
Bull	1 @ 1300 lbs.= 1,300 lbs. @ 20¢=	<u>260.</u>
	Total	\$11,069.

* Five year average 1958-1962 Stockton Good and Choice

**Three year average 1958-1960 Stockton Good and Choice

Basic Guide of Cost to Produce Beef (continued)

Expenses (Equivalent to 85 Acres Irrigated Pasture)

	<u>per cow cost</u>	<u>total costs</u>
Rented irrigated pasture		
85 cows 510 hd mo @ \$5.00	\$25.50	\$ 2,550.
15 yr. heifers 90 hd mo @ 4.00	3.60	360.
Hay 50 tons @ \$18.00	9.00	900.
Gasoline	7.00	700.
Veterinary and Medicine	1.11	111.
Insurance	2.45	245.
Repairs	6.02	602.
Interest on working capital	2.68	268.
Taxes	6.77	677.
Bull replacement	4.31	431.
Misc.-Office, Telephone, Supplies, etc.	3.73	373.
Depreciation (Equipment, Fences, Buildings)	<u>10.00</u>	<u>1,000.</u>
Totals	\$82.17	\$ 8,217.
 NET FARM INCOME _____	 \$28.52	 \$ 2,852.*

Calendar of Feeds - This will vary from year to year depending on weather conditions, but will approximate the following dates:

Dec. 15 to Feb. 28 - Feed hay - 10 lb. per cow per day
75 days=750 lbs.

Mar. 1 to June 1 - Winter Range

June 1 to Nov. 30 - Summer irrigated pasture

Nov. 30 to Dec. 15 - Dry feed on winter range

Breed (January through March) - Calve (October through Dec.)

Dry cows sold in May off spring feed.

*Before interest on investment, operators labor, and management are taken out.

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