

Beef Cow and Calf Production
Sample Costs and Returns for
Mendocino County

This is a sample budget for an owner-operated, beef cow-calf ranch in Mendocino County. The owner provides the management, capital, and his/her labor; additional labor is hired as needed.

An 85 percent calf crop is weaned, 20 percent of the cows are replaced each year, and there is a two percent cow mortality. Range land is charged at current rental rates assuming a carrying capacity of 40 acres per cow.

The cash costs per cow are itemized below. These costs are fairly stable on a per cow basis regardless of herd size. On the next page investment costs and sample returns for two herd sizes are estimated. The "Your Estimates" column is for you to adjust these estimates to your own ranch.

Cash Costs	Per Cow	Your Estimates
Range; 40 acres, \$2.50/acre	\$100.00*	
Hay; 900 lbs., \$120/ton	54.00	
Salt & minerals	2.00	
Horse hay; 3 tons/horse, .02 horse/cow, \$80/ton	4.80	
Dog food; \$6/mo./dog, .24 dog-mo./cow	1.44	
TOTAL FEED =	\$162.24	
Hired Labor; 10 hours, \$6.50/hour	65.00**	
Bull replacements; 25% replaced annually 1 bull per 25 cows, \$1200/bull	12.00	
Veterinary & medicine	12.00	
Utilities	15.00	
Repairs	10.00	
Hauling	5.00	
Insurance	15.00	
Office & misc. costs	10.00	
Interest on operating capital; 14%	21.00	
TOTAL CASH COSTS =	\$327.24	

* Range rents vary by area and season.

** Small herds may need no help.

To show the importance of good management, weather, and other factors, the estimated cash costs per cow are used to calculate the cash costs per pound of calf. The costs per pound of calf are calculated by subtracting the value of cull cows and bulls per cow (\$82.60) from the total cash cost per cow, (\$327.24) and then dividing by the weight of the weaned calves except for the heifer calves kept for replacement. The table below assumes that heifer weaning weight is 5% less than steer weaning weight. Different weaning percentages and weights show the effect of timeliness, proper management, weather and other factors.

Cash costs per pound

Steer Weaning Weight (lbs.)	Weaning Percentage							
	60%	65%	70%	75%	80%	85%	90%	95%
	-----(\$/lb)-----							
350	1.77	1.58	1.42	1.29	1.18	1.09	1.02	.95
400	1.55	1.38	1.24	1.13	1.04	.96	.89	.83
450	1.38	1.23	1.10	1.00	.92	.85	.79	.74
500	1.24	1.10	.99	.90	.83	.77	.71	.66
550	1.13	1.00	.90	.82	.75	.70	.65	.60
600	1.03	.92	.83	.75	.69	.64	.59	.55
650	.95	.85	.76	.70	.64	.59	.55	.51

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The investment costs will vary by herd size. Larger herds may make better use of some machinery and equipment, thus giving them a competitive advantage. The investment costs and the estimated returns for a 100 cow herd and a 300 cow herd are specified below

	Total Investment for		Your Estimates cows
	100 cows	300 cows	
<u>Livestock</u>			
Cows; \$400	\$40,000	\$120,000	
Bulls; \$1200, 1 per 25 cows	4,800	14,400	
Replacement heifers; \$400, 20% of cow herd	8,000	24,000	
Horses; \$1000, 2 per 100 cows	2,000	6,000	
Dogs; \$200, 2 per 100 cows	400	1,200	
	SUBTOTAL =	\$55,200	\$165,600
<u>Machinery & Equipment</u>			
Pickup, 3/4 ton, 4WD (7 yrs. life)	\$12,000	\$ 12,000	
Gooseneck trailer (7 yrs. life)	5,000	-	
Wheel tractor, 50 hp (7 yrs. life)	20,000	20,000	
Truck, 2 1/2 ton (7 yrs. life)	-	18,000	
2-Horse trailer (7 yrs. life)	3,000	3,000	
Sprayer, 100 gal. (5 yrs. life)	500	500	
Corrals, gates, chutes (7 yrs. life)	7,000	18,000	
Saddles & tack (7 yrs. life)	1,600	2,400	
Misc. tools & equipment (10 yrs. life)	3,000	6,000	
	SUBTOTAL =	\$52,100	\$ 79,900
	TOTAL INVESTMENT =	\$107,300	\$245,500
	PER COW =	\$ 1,073	\$ 818

Estimated Returns and Costs for two herd sizes:

	Total Costs & Returns		Your Estimates cows
	100 cows	300 cows	
<u>Gross Income</u>			
Steer calves; 450 lbs., 43 per 100 cow, \$.65/lb	\$12,578	\$ 37,733	
Heifer yearlings; 700 lbs., 22 per 100 cows, .55/lb	8,470	25,410	
Butcher cows; 1000 lbs., 18 per 100 cows, \$.42/lb	7,560	22,680	
Cull bulls; 1400 lbs., 1 per 100 cows \$.50/lb	700	2,100	
	TOTAL =	\$29,308	\$ 87,923
<u>Cash Costs;</u> \$327.24	\$32,724	\$ 98,172	
<u>Cash Income</u> (Gross Income - Cash Costs)	(\$ 3,416)	(\$ 10,249)	
<u>Fixed Investment Costs</u>			
<u>Depreciation:</u>			
Bulls, horses & dogs	\$ 1,440	\$ 4,320	
Machinery & equipment	7,343	11,186	
Interest on investment; 14% of 1/2 investment:	\$ 7,511	\$ 17,185	
	TOTAL =	\$16,294	\$ 32,691
<u>Return to owner's labor and management:</u>	(\$19,710)	(\$ 42,940)	