

Cow-Calf—200 Cow

Summer on Private Pasture and Federal Range Winter Feeding Necessary



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Background and Assumptions

This budget presents the average costs and returns per cow for a 200-head cow-calf operation. The forage source is private pasture and federal range (BLM and Forest Service), and feeding is necessary in the winter.

Livestock Investment

Livestock investment is 200 cows, 10 bulls, and 3 horses. Cows have a useful life of 6 years including a 14 percent cull rate and a 2 percent death loss rate. Bulls are purchased and replaced every 4 years. The weaned calf crop is 92 percent of the number of cows wintered.¹ Of the 36 weaned heifer calves selected from the calf crop as replacements, four are culled because of nonbreeding or poor quality. This leaves a replacement rate of 32 head each year.

Machinery and Equipment

Machinery and equipment investments are sufficient to make the operation functional. The operation uses a 3/4-ton pickup (4x4), a stock truck, and an 80-HP tractor with a loader.

Buildings and Improvements

The ranch has 8 miles of fence, one barn, one corral with working alleys, a squeeze, a calf cradle, and a gooseneck trailer. There is a normal complement of veterinary equipment. Water is from natural sources.

Management Practices

The cows calve about January 15 to April 15. From December 1 through April 30, all cattle are fed a mixture of alfalfa and grass hay. Replacement heifers are also fed barley supplements. Monthly herd feed quantities are listed in Table 3 while daily feed quantities per animal are summarized below.

Animals	Alfalfa/grass hay (lb fed/day)	Feed barley (lb fed/day)	Number of days
Replacement heifer	—	1.8	150
Replacement heifer	13	—	150
Cow	25	—	150
Bull	28	—	150
Horse	20	—	150

Only some of the cattle graze on BLM and Forest Service range. Typically, an operation uses a combination of deeded and federal range. The cattle migrate from BLM to Forest Service range as the season progresses, and by October 1 they have been gathered and worked. Cows and replacements are then put on hay aftermath. Costs are included in the budget for all lands that are grazed.

The top end of the heifer calves are kept as replacements, while the rest of the heifers (56 head) plus 92 steer calves and cull animals are sold in November. The costs of selling cattle include checkoff/brand inspection, sales commissions, and freight/trucking. Checkoff/brand inspection costs pertain to all cattle sold in the enterprise including cull animals. Sales commission and freight costs pertain to cull animals only since they are sold through the sale yard. All steer and heifer calves are sold direct.

Veterinary care for calves includes viral treatments and 7-way vaccinations, given twice during the year, implants and BOSE vaccinations. Heifer calves are also vaccinated for bangs. Cows and replacement heifers are treated for vibrio, leptospirosis, parasites, and given preg checks and 8-way vaccinations. Bulls are given about the same veterinary treatments as cows and replacements plus a semen/trich test.

Labor is provided by the operator and one other person and is valued at \$7.00 per hour. The hired la-

¹Percent calf crop = $\frac{\text{number of calves} \times 100}{\text{number of cows wintered}}$

**Table1: Cow-Calf Budget - 200 Cow
Summer on Private Pasture and Federal Range
Winter Feeding Necessary**

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	Weight Each	Unit	Total Number of Head or Units	Price or Cost/Unit	Total Value	Value or Cost/Head	Your Value
1. Gross Receipts							
Steer calves	5.40	cwt	92	83.00	41,234.40	206.17	_____
Heifer calves	5.00	cwt	56	79.00	22,120.00	110.60	_____
Aged bull	16.50	cwt	3	43.00	2128.50	10.64	_____
Cull cows	11.00	cwt	28	38.00	11,704.00	58.52	_____
Cull replacement heifer	9.00	cwt	4	61.00	2196.00	10.98	_____
Total Receipts					\$79,382.90	\$396.91	_____
2. Operating Costs							
Feed barley		cwt	100.01	5.30	530.04	2.65	_____
Alfalfa grass hay		ton	250.73	70.00	17,550.75	87.75	_____
Meadow hay		ton	187.50	60.00	11,250.00	56.25	_____
Federal range		AUM	743.99	1.71	1272.23	6.36	_____
Meadow pasture		AUM	473.08	12.00	5676.94	28.38	_____
Crop aftermath		AUM	484.00	11.00	5324.00	26.62	_____
Salt		lb	7200.00	0.06	432.00	2.16	_____
Protein supplement - 20%		cwt	152.00	8.75	1330.00	6.65	_____
Minerals		lb	2800.00	0.24	672.00	3.36	_____
Checkoff/brand inspection		head	183.00	2.15	393.45	1.97	_____
Commission		head	35.00	9.00	315.00	1.58	_____
Freight/trucking		head	35.00	8.57	299.95	1.50	_____
Veterinary Medicine		\$	2923.27	1.00	2923.27	14.62	_____
Machinery (fuel, lubrication, repair)		\$	1913.40	1.00	1913.40	9.57	_____
Vehicles (fuel, repair)		\$	3642.50	1.00	3642.50	18.21	_____
Equipment (repair)		\$	680.14	1.00	680.14	3.40	_____
Housing and Improvements (repair)		\$	559.85	1.00	559.85	2.80	_____
Hired Labor		hour	2000.00	7.00	14,000.00	70.00	_____
Owner Labor		hour	518.00	7.00	3626.00	18.13	_____
Interest on Operating Capital		\$	30,939.52	0.10	2939.25	14.70	_____
Total Operating Costs					\$75,330.78	\$376.65	_____
3. Income Above Operating Costs					\$4052.12	\$20.26	_____
4. Ownership Costs							
Capital Recovery:							
Purchased Livestock		\$	4411.83	1.00	4411.83	22.06	_____
Housing and Improvements		\$	3947.99	1.00	3947.99	19.74	_____
Machinery		\$	2432.26	1.00	2432.26	12.16	_____
Equipment		\$	1839.23	1.00	1839.23	9.20	_____
Vehicles		\$	5192.68	1.00	5192.68	25.96	_____
Interest on Retained Livestock		\$	100,300.00	0.09	8776.25	43.88	_____
Taxes and Insurance		\$	1209.94	1.00	1209.94	6.05	_____
Overhead		\$	3000.00	1.00	3000.00	15.00	_____
Total Ownership Costs					\$30,810.18	\$154.05	_____
5. Total Costs					\$106,140.96	\$530.70	_____
6. Returns to Risk and Management					-\$26,758.06	-\$133.79	_____

Table 4: Investment Summary.**EBB-CC2-98**

	Purchase Price	Salvage/Cull Value	Livestock Share	Useful Life	Annual Taxes and Insurance	Annual Capital Recovery ¹
Buildings, Improvements and Equipment						
Fencing CC2	\$20,600.00	\$0.00	100	25	\$164.80	\$2054.88
Corral CC2	\$7300.00	\$750.00	100	30	\$64.40	\$689.09
Barn	\$12,750.00	\$1250.00	100	30	\$112.00	\$1204.01
Calf Cradle	\$900.00	\$80.00	100	10	\$7.84	\$133.37
Gooseneck trailer	\$12,500.00	\$1155.00	100	20	\$109.24	\$1321.80
Squeeze	\$1950.00	\$180.00	100	10	\$17.04	\$288.52
Vet equipment	\$800.00	\$65.00	100	15	\$6.92	\$95.53
Total	\$56,800.00				\$482.24	\$5787.21
Purchased Livestock						
Bulls	\$17,000.00	\$6500.00	100	4		\$3792.00
Horses	\$4800.00	\$1800.00	100	10		\$619.83
Total	\$21,800.00					\$4411.83
Retained Livestock						
Cows	\$100,000.00	\$70,000.00	100			\$7437.50 ²
Replacement heifers	\$18,000.00	\$12,600.00	100			\$1338.75 ²
Total	\$118,000.00					\$8776.25²
Machinery and Vehicles						
Tractor loader	\$45,300.00	\$9000.00	50	18	\$217.20	\$2432.26
Pickup 4x4 3/4 ton	\$27,000.00	\$5400.00	75	8	\$303.75	\$3390.13
Truck 2 ton	\$28,000.00	\$5080.00	50	12	\$206.75	\$1802.55
Total	\$100,300.00				\$727.70	\$7624.94

¹ Annual capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Costs and Returns Measurement Methods.

² Interest on average investment.

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